

Sequence listing.txt

SEQUENCE LISTING

<110> Christopher C Burgess et al

<120> Detection Methods Using TIMP1

<130> 1657/2012

<160> 138

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 777

<212> DNA

<213> Homo sapiens

<400> 1

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<212> PRT

<213> Homo sapiens

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Arg Ile Ser Cys Pro Glu Gly Thr Asn Ala Tyr Arg Ser Tyr Cys Tyr
35     40     45
Tyr Phe Asn Glu Asp Arg Glu Thr Trp Val Asp Ala Asp Leu Tyr Cys
50     55     60
Gln Asn Met Asn Ser Gly Asn Leu Val Ser Val Leu Thr Gln Ala Glu
65     70     75     80
Gly Ala Phe Val Ala Ser Leu Ile Lys Glu Ser Gly Thr Asp Asp Phe
85     90     95
Asn Val Trp Ile Gly Leu His Asp Pro Lys Lys Asn Arg Arg Trp His
100    105    110
Trp Ser Ser Gly Ser Leu Val Ser Tyr Lys Ser Trp Gly Ile Gly Ala
115    120    125
Pro Ser Ser Val Asn Pro Gly Tyr Cys Val Ser Leu Thr Ser Ser Thr
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Sequence listing.txt

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 <213> Homo sapiens

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 <213> Homo sapiens

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 Gly Ala Phe Val Ala Ser Leu Ile Lys Glu Ser Gly Thr Asp Asp Phe
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 145 150 155 160
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<210> 5
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<212> DNA

<213> Homo sapiens

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Sequence listing.txt

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<210> 7

<211> 1639

<212> DNA

<213> Homo sapiens

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<211> 1524

<212> DNA

<213> Homo sapiens

Sequence listing.txt

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<210> 9

<211> 5500

<212> DNA

<213> Homo sapiens

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Sequence listing.txt

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<213> Homo sapiens

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Sequence listing.txt

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<211> 1098
<212> DNA
<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1074

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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Sequence listing.txt

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 <212> DNA
 <213> Homo sapiens

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 <211> 2116
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<211> 3583

<212> DNA

<213> Homo sapiens

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<211> 905

<212> DNA

<213> Homo sapiens

<400> 32

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<213> Homo sapiens

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782

Sequence listing.txt

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Sequence listing.txt

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<212> DNA
<213> Homo sapiens

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<210> 38
<211> 1200
<212> DNA
<213> Homo sapiens

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<210> 39

<211> 1701

<212> DNA

<213> Homo sapiens

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<211> 1163

<212> DNA

<213> Homo sapiens

<400> 44

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Sequence listing.txt

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<211> 2007

<212> DNA

<213> Homo sapiens

<400> 45

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<210> 46

<211> 1650

<212> DNA

<213> Homo sapiens

<400> 46

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<210> 47

<211> 2566

<212> DNA

<213> Homo sapiens

<400> 47

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Sequence listing.txt

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<210> 48

<211> 2067

<212> DNA

<213> Homo sapiens

<400> 48

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<211> 1752

<212> DNA

<213> Homo sapiens

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<211> 1412
<212> DNA
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<210> 51
<211> 1407
<212> DNA
<213> Homo sapiens

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Sequence listing.txt

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```

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<210> 52
<211> 1723
<212> DNA
<213> Homo sapiens

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<210> 53
<211> 4139
<212> DNA
<213> Homo sapiens

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Sequence Listing.txt

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Sequence listing.txt

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<213> Homo sapiens

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Sequence listing.txt

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Sequence listing.txt

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 <212> DNA
 <213> Homo sapiens

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<210> 61
 <211> 878
 <212> DNA
 <213> Homo sapiens

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Sequence listing.txt

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 <213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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Sequence listing.txt

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<211> 3557

<212> DNA

<213> Homo sapiens

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Sequence listing.txt

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<211> 3464

<212> DNA

<213> Homo sapiens

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Sequence listing.txt

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<210> 66
<211> 1022
<212> DNA
<213> Homo sapiens

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Sequence listing.txt

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 <212> DNA
 <213> Homo sapiens

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<210> 68
 <211> 2249
 <212> DNA
 <213> Homo sapiens

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Sequence listing.txt

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<210> 69
 <211> 2292
 <212> DNA
 <213> Homo sapiens

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ctatcactat attttgcaga atggaaactg cctgactct tgaatcacia ataaaagcca 2280
attgtatctg tt 2292

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<210> 70
 <211> 2297
 <212> DNA
 <213> Homo sapiens

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<400> 70
agccgtgctc agaaagtttc tggatcccag gctcatctcc acagaggaga acacgcaggc 60

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Sequence listing.txt

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agcagagacc atggggccca tctcagcccc ttcctgcaga tggcgcatcc cctggcaggg 120
gctcctgctc acagcctcac ttttcacctt ctggaaccgc cccaccactg ctcagctcac 180
tattgaagct gtgccatcca atgctgcaga ggggaaggag gttcttctac ttgtccacaa 240
tctgccccag gaccctcggt gctacaactg gtacaaaggg gaaacagtgg atgccaaccg 300
tcgaattata ggatatgtaa tatcaaatac acagattacc ccagggcctg catacagcaa 360
tcgagagaca atatacccca atgcatccct gctgatgcgg aacgtcacca gaaatgacac 420
aggatcctac accctacaag tcataaagct aaatcttatg agtgaagaag taactggcca 480
gttcagcgta catccggaga ctcccaagcc ctccatctcc agcaacaact ccaaccccg 540
ggaggacaag gatgctgtgg cttcacctg tgaacctgag actcagaaca caacctacct 600
gtgggtgggt aatggtcaga gtctcccggt cagtcaccag ctgcagctgt ccaatggcaa 660
caggaccctc actctactca gtgtcacaag gaatgacgta ggaccctatg aatgtgaaat 720
acagaaccac gcgagtgcaa acttcagtga cccagtcacc ctgaatgtcc tctatggccc 780
agatgcccc caccatttccc tctcagacac ctattaccat gcaggggtaa atctcaacct 840
ctcctgccat gcggcctcta atccaccctc acagtattct tggctctgtc atggcacatt 900
ccagcaatac acacaaaagc tctttatccc caacatcact acaaagaaca gcggatccta 960
tgcttgccac accactaact cagccactgg ccgcaacagg accacagtca ggatgatcac 1020
agtctctgat gcttttagtac aaggaagttc tcttgccctc tcagctagag ccactgtcag 1080
catcatgatt ggagtactgg ccagggtggc tctgatatag tagctctggt gtatgtttctg 1140
catttcaaga agactggcag acagttgttt ttattcttcc tcaaagcatt tgcaatcagc 1200
taccattcaa aattgcttct tcttcaagat ttatggaaaa tactctgacg agtactcttg 1260
aacacaagtt cctgataact ttaagatcac gccactggac tgtctatgaa cttgcaaaca 1320
ggctgatacc tttgtgaagt tgcccaccaa aacacagaag gaaaaaaca tgaatttcat 1380
tgaactaaat aataatgagg ataatgtttt taagattttt tttttttttt gagatggaat 1440
ctcgtctgtg cgcacaggtc ggagtgcagt ggcacgatct caactcactg caagctccgc 1500
ctcctgggtt cacaccattc tctgcctca gcctcctgag tagctgggac tacaggcgcc 1560
tgccacaacg cccggctaatt ttttgtatt tttagtagag acgggggttc actgtggtct 1620
caatctcctg acttcatggt ccgcctgcct cagcctccca aagttctggg attacagggtg 1680
tgagccaccg cgcccagccc gtttttaaga ttttttattt gaaaaattgc caattcttta 1740
agtgtttttt ttttcagatt tatgaatttc tttatctttt aagctatcta taccttactg 1800
caatttggtt aagcagactt ttgtgaacaa aaattataac atttactttt gctccctacc 1860
tgactgccac agaactgggc aactattcat gagtattcat atgtttatgg taattcagtt 1920
atgtgcacaa gttcagtgag aatctgctgt ctttataatg ggatatagtt taaaacattg 1980
gttatattac caaggctttg attgggatgt tatatttgag aaaatacaga gaatgataga 2040
ttaacggagt gtctaatact tcgtgtcaac cccaaatttt tacgtatgag atcctttagt 2100
ccacccaatg gctgacagta acagcatctt taacacaact ctttgttcaa atgtactatg 2160
gtctctttta gactgcagact cctagactca ctgttcttca ctgtctgttt taatttaacc 2220
caggcatgca atgctagata ataaaattgc tccctattgg ctgatcaaaa aaaaaaaaaa 2280
aaaaaaaaa aaaaaaa 2297

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<210> 71

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 71

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gcccgtacac accgtgtgct gggacacccc acagtcagcc gcatggctcc cctgtgcccc 60
agccccctggc tccctctgtt gatccccggc cctgctccag gcctcactgt gcaactgctg 120
ctgtcactgc tgcttctgat gcctgtccat ccccagaggt tgccccggat gcaggaggat 180
tcccccttgg gaggaggctc ttctggggaa gatgaccac tgggcgagga ggatctgccc 240
agtgaagagg attcaccacg agaggaggat ccacccggag aggaggatct acctggagag 300
gaggatctac ctggagagga ggatctacct gaagttaagc ctaaatacaga agaagagggc 360
tccctgaagt tagaggatct acctactggt gaggtcctc gagatcctca agaaccccag 420
aataatgccc acagggacaa agaaggggat gaccagagtc attggcgcta tggaggcgac 480
ccgcccctggc cccgggtgtc cccagcctgc gcgggcccgt tccagtcctc ggtggatatc 540
cgccccagc tcgcccgtt ctgcccggcc ctgcccctc tggaaactct gggcttccag 600
ctcccgcgc tcccagaact gcgcctgcgc aacaatggcc acagtgtgca actgaccctg 660
cctcctgggc tagagatggc tctgggtccc gggcgggagt accgggctct gcagctgcat 720
ctgactggg gggctgcagg tcgtccgggc tcggagcaca ctgtggaagg ccaccgtttc 780
cctgccgaga tccactggt tcacctcagc accgcctttg ccagagttga cgaggccttg 840
gggcgcccgg gaggcctggc cgtgttggcc gcctttctgg aggagggcc ggaagaaaaa 900
agtgcctatg agcagttgct gtctcgcttg gaagaaatcg ctgagggaagg ctgagagact 960
caggctccag gactggacat atctgcactc ctgcccctct acttcagccg ctacttccaa 1020
tatgaggggt ctctgactac accgcctgtg gccagggtg tcatctggac tgtgtttaac 1080

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Sequence listing.txt

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cagacagtga tgctgagtgc taagcagctc cacaccctct ctgacaccct gtggggacct 1140
ggtgactctc ggctacagct gaacttccga gcgacgcagc ctttgaatgg gcgagtgtatt 1200
gaggcctcct tccctgctgg agtggacagc agtcctcggg ctgctgagcc agtccagctg 1260
aattcctgcc tggctgctgg tgacatccta gccctggttt ttggcctcct ttttgctgtc 1320
accagcgtcg cgttccttgt gcagatgaga aggcagcaca gaaggggaac caaagggggg 1380
gtgagctacc gccagcaga ggtagccgag actggagcct agaggctgga tcttgagaa 1440
tgtgagaagc cagccagagg catctgaggg ggagccggta actgtcctgt cctgctcatt 1500
atgccacttc cttttaactg ccaagaaatt ttttaaata aatatttata at 1552

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<210> 72

<211> 702

<212> PRT

<213> Homo sapiens

<400> 72

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Met Glu Ser Pro Ser Ala Pro Pro His Arg Trp Cys Ile Pro Trp Gln
1      5      10      15
Arg Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
20      25      30
Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly
35      40      45
Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly
50      55      60
Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Ile
65      70      75      80
Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser
85      90      95
Gly Arg Glu Ile Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Ile
100     105     110
Ile Gln Asn Asp Thr Gly Phe Tyr Thr Leu His Val Ile Lys Ser Asp
115     120     125
Leu Val Asn Glu Glu Ala Thr Gly Gln Phe Arg Val Tyr Pro Glu Leu
130     135     140
Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Lys Pro Val Glu Asp Lys
145     150     155     160
Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Ala Thr Tyr
165     170     175
Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg Leu Gln
180     185     190
Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn Val Thr Arg Asn
195     200     205
Asp Thr Ala Ser Tyr Lys Cys Glu Thr Gln Asn Pro Val Ser Ala Arg
210     215     220
Arg Ser Asp Ser Val Ile Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro
225     230     235     240
Thr Ile Ser Pro Leu Asn Thr Ser Tyr Arg Ser Gly Glu Asn Leu Asn
245     250     255
Leu Ser Cys His Ala Ala Ser Asn Pro Ala Gln Tyr Ser Trp Phe
260     265     270
Val Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn
275     280     285
Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys Gln Ala His Asn Ser
290     295     300
Asp Thr Gly Leu Asn Arg Thr Thr Val Thr Thr Ile Thr Val Tyr Ala
305     310     315     320
Glu Pro Pro Lys Pro Phe Ile Thr Ser Asn Asn Ser Asn Pro Val Glu
325     330     335
Asp Glu Asp Ala Val Ala Leu Thr Cys Glu Pro Glu Ile Gln Asn Thr
340     345     350
Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Pro Val Ser Pro Arg
355     360     365
Leu Gln Leu Ser Asn Asp Asn Arg Thr Leu Thr Leu Leu Ser Val Thr
370     375     380

```

Sequence listing.txt

Arg Asn Asp Val Gly Pro Tyr Glu Cys Gly Ile Gln Asn Glu Leu Ser
 385 390 395 400
 Val Asp His Ser Asp Pro Val Ile Leu Asn Val Leu Tyr Gly Pro Asp
 405 410 415
 Asp Pro Thr Ile Ser Pro Ser Tyr Thr Tyr Tyr Arg Pro Gly Val Asn
 420 425 430
 Leu Ser Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser
 435 440 445
 Trp Leu Ile Asp Gly Asn Ile Gln Gln His Thr Gln Glu Leu Phe Ile
 450 455 460
 Ser Asn Ile Thr Glu Lys Asn Ser Gly Leu Tyr Thr Cys Gln Ala Asn
 465 470 475 480
 Asn Ser Ala Ser Gly His Ser Arg Thr Thr Val Lys Thr Ile Thr Val
 485 490 495
 Ser Ala Glu Leu Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Lys Pro
 500 505 510
 Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Ala Gln
 515 520 525
 Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser
 530 535 540
 Pro Arg Leu Gln Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Phe Asn
 545 550 555 560
 Val Thr Arg Asn Asp Ala Arg Ala Tyr Val Cys Gly Ile Gln Asn Ser
 565 570 575
 Val Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asp Val Leu Tyr Gly
 580 585 590
 Pro Asp Thr Pro Ile Ile Ser Pro Pro Asp Ser Ser Tyr Leu Ser Gly
 595 600 605
 Ala Asn Leu Asn Leu Ser Cys His Ser Ala Ser Asn Pro Ser Pro Gln
 610 615 620
 Tyr Ser Trp Arg Ile Asn Gly Ile Pro Gln Gln His Thr Gln Val Leu
 625 630 635 640
 Phe Ile Ala Lys Ile Thr Pro Asn Asn Asn Gly Thr Tyr Ala Cys Phe
 645 650 655
 Val Ser Asn Leu Ala Thr Gly Arg Asn Asn Ser Ile Val Lys Ser Ile
 660 665 670
 Thr Val Ser Ala Ser Gly Thr Ser Pro Gly Leu Ser Ala Gly Ala Thr
 675 680 685
 Val Gly Ile Met Ile Gly Val Leu Val Gly Val Ala Leu Ile
 690 695 700

<210> 73

<211> 609

<212> PRT

<213> Homo sapiens

<400> 73

Met Lys Trp Val Glu Ser Ile Phe Leu Ile Phe Leu Leu Asn Phe Thr
 1 5 10 15
 Glu Ser Arg Thr Leu His Arg Asn Glu Tyr Gly Ile Ala Ser Ile Leu
 20 25 30
 Asp Ser Tyr Gln Cys Thr Ala Glu Ile Ser Leu Ala Asp Leu Ala Thr
 35 40 45
 Ile Phe Phe Ala Gln Phe Val Gln Glu Ala Thr Tyr Lys Glu Val Ser
 50 55 60
 Lys Met Val Lys Asp Ala Leu Thr Ala Ile Glu Lys Pro Thr Gly Asp
 65 70 75 80
 Glu Gln Ser Ser Gly Cys Leu Glu Asn Gln Leu Pro Ala Phe Leu Glu
 85 90 95
 Glu Leu Cys His Glu Lys Glu Ile Leu Glu Lys Tyr Gly His Ser Asp
 100 105 110
 Cys Cys Ser Gln Ser Glu Glu Gly Arg His Asn Cys Phe Leu Ala His

Sequence listing.txt

Sequence alignment															
Firsting: 125															
115															
120															
125															
Lys 130	Pro 135	Thr 140	Pro 145	Ala 150	Ser 155	Ile 160	Pro 165	Leu 170	Phe 175	Gln 180	Val 185	Pro 190	Glu 195	Pro 200	Asn 205
Val 145	Thr 150	Ser 155	Cys 160	Glu 165	Ala 170	Tyr 175	Glu 180	Glu 185	Asp 190	Arg 195	Glu 200	Thr 205	Phe 210	Met 215	Asn 220
Lys 150	Phe 155	Ile 160	Tyr 165	Glu 170	Ala 175	Ala 180	Arg 185	Arg 190	His 195	Pro 200	Phe 205	Leu 210	Tyr 215	Ala 220	Pro 225
Thr 155	Ile 160	Leu 165	Leu 170	Trp 175	Ala 180	Ala 185	Arg 190	Tyr 195	Asp 200	Lys 205	Ile 210	Ile 215	Pro 220	Ser 225	Cys 230
Cys 160	Lys 165	Ala 170	Glu 175	Asn 180	Ala 185	Val 190	Glu 195	Cys 200	Phe 205	Gln 210	Thr 215	Lys 220	Ala 225	Ala 230	Thr 235
Val 165	Thr 170	Lys 175	Glu 180	Leu 185	Arg 190	Glu 195	Ser 200	Ser 205	Leu 210	Leu 215	Asn 220	Gln 225	His 230	Ala 235	Cys 240
Ala 170	Val 175	Met 180	Lys 185	Asn 190	Phe 195	Gly 200	Thr 205	Arg 210	Thr 215	Phe 220	Gln 225	Ala 230	Ile 235	Thr 240	Val 245
Thr 175	Lys 180	Leu 185	Ser 190	Gln 195	Lys 200	Phe 205	Thr 210	Lys 215	Val 220	Asn 225	Phe 230	Thr 235	Glu 240	Ile 245	Gln 250
Lys 180	Leu 185	Val 190	Leu 195	Leu 200	Val 205	Ala 210	His 215	Val 220	His 225	Glu 230	His 235	Cys 240	Cys 245	Arg 250	Gly 255
Asp 185	Val 190	Leu 195	Leu 200	Asp 205	Cys 210	Gln 215	Asp 220	Gly 225	Glu 230	Lys 235	Ile 240	Met 245	Ser 250	Tyr 255	Ile 260
Cys 190	Ser 195	Gln 200	Gln 205	Asp 210	Thr 215	Leu 220	Ser 225	Asn 230	Lys 235	Ile 240	Thr 245	Glu 250	Cys 255	Cys 260	Lys 265
Leu 195	Thr 200	Thr 205	Leu 210	Glu 215	Arg 220	Gly 225	Gln 230	Cys 235	Ile 240	Ile 245	His 250	Ala 255	Glu 260	Asn 265	Asp 270
Glu 200	Lys 205	Pro 210	Glu 215	Gly 220	Leu 225	Ser 230	Pro 235	Asn 240	Leu 245	Asn 250	Arg 255	Phe 260	Leu 265	Gly 270	Asp 275
Arg 205	Asp 210	Phe 215	Asn 220	Gln 225	Phe 230	Ser 235	Ser 240	Gly 245	Glu 250	Lys 255	Asn 260	Ile 265	Phe 270	Leu 275	Ala 280
Ser 210	Phe 215	Val 220	His 225	Glu 230	Tyr 235	Ser 240	Arg 245	Arg 250	His 255	Pro 260	Gln 265	Leu 270	Ala 275	Val 280	Ser 285
Val 215	Ile 220	Leu 225	Arg 230	Val 235	Ala 240	Lys 245	Gly 250	Tyr 255	Gln 260	Glu 265	Leu 270	Leu 275	Glu 280	Lys 285	Cys 290
Phe 220	Gln 225	Thr 230	Glu 235	Asn 240	Pro 245	Leu 250	Glu 255	Cys 260	Gln 265	Asp 270	Lys 275	Gly 280	Glu 285	Glu 290	Glu 295
Leu 225	Gln 230	Lys 235	Tyr 240	Ile 245	Gln 250	Glu 255	Ser 260	Gln 265	Ala 270	Leu 275	Ala 280	Lys 285	Arg 290	Ser 295	Cys 300
Gly 230	Leu 235	Phe 240	Gln 245	Lys 250	Leu 255	Gly 260	Glu 265	Tyr 270	Tyr 275	Leu 280	Gln 285	Asn 290	Ala 295	Phe 300	Leu 305
Val 235	Ala 240	Tyr 245	Thr 250	Lys 255	Lys 260	Ala 265	Pro 270	Gln 275	Leu 280	Thr 285	Ser 290	Ser 295	Glu 300	Leu 305	Met 310
Ala 240	Ile 245	Thr 250	Arg 255	Lys 260	Met 265	Ala 270	Ala 275	Thr 280	Ala 285	Ala 290	Thr 295	Cys 300	Cys 305	Gln 310	Leu 315
Ser 245	Glu 250	Asp 255	Lys 260	Leu 265	Leu 270	Ala 275	Cys 280	Gly 285	Glu 290	Gly 295	Ala 300	Ala 305	Asp 310	Ile 315	Ile 320
Ile 250	Gly 255	His 260	Leu 265	Cys 270	Ile 275	Arg 280	His 285	Glu 290	Met 295	Thr 300	Pro 305	Val 310	Asn 315	Pro 320	Gly 325
Val 255	Gly 260	Gln 265	Cys 270	Cys 275	Thr 280	Ser 285	Ser 290	Tyr 295	Ala 300	Asn 305	Arg 310	Arg 315	Pro 320</		

Sequence listing.txt

<210> 74
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 74
 Met Thr Ser Lys Leu Ala Val Ala Leu Leu Ala Ala Phe Leu Ile Ser
 1 5 10 15
 Ala Ala Leu Cys Glu Gly Ala Val Leu Pro Arg Ser Ala Lys Glu Leu
 20 25 30
 Arg Cys Gln Cys Ile Lys Thr Tyr Ser Lys Pro Phe His Pro Lys Phe
 35 40 45
 Ile Lys Glu Leu Arg Val Ile Glu Ser Gly Pro His Cys Ala Asn Thr
 50 55 60
 Glu Ile Ile Val Lys Leu Ser Asp Gly Arg Glu Leu Cys Leu Asp Pro
 65 70 75 80
 Lys Glu Asn Trp Val Gln Arg Val Val Glu Lys Phe Leu Lys Arg Ala
 85 90 95
 Glu Asn Ser

<210> 75
 <211> 300
 <212> PRT
 <213> Homo sapiens

<400> 75
 Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala
 1 5 10 15
 Ile Pro Val Lys Gln Ala Asp Ser Gly Ser Ser Glu Glu Lys Gln Leu
 20 25 30
 Tyr Asn Lys Tyr Pro Asp Ala Val Ala Thr Trp Leu Asn Pro Asp Pro
 35 40 45
 Ser Gln Lys Gln Asn Leu Leu Ala Pro Gln Thr Leu Pro Ser Lys Ser
 50 55 60
 Asn Glu Ser His Asp His Met Asp Asp Met Asp Asp Glu Asp Asp Asp
 65 70 75 80
 Asp His Val Asp Ser Gln Asp Ser Ile Asp Ser Asn Asp Ser Asp Asp
 85 90 95
 Val Asp Asp Thr Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser
 100 105 110
 Asp Glu Ser Asp Glu Leu Val Thr Asp Phe Pro Thr Asp Leu Pro Ala
 115 120 125
 Thr Glu Val Phe Thr Pro Val Val Pro Thr Val Asp Thr Tyr Asp Gly
 130 135 140
 Arg Gly Asp Ser Val Val Tyr Gly Leu Arg Ser Lys Ser Lys Lys Phe
 145 150 155 160
 Arg Arg Pro Asp Ile Gln Tyr Pro Asp Ala Thr Asp Glu Asp Ile Thr
 165 170 175
 Ser His Met Glu Ser Glu Glu Leu Asn Gly Ala Tyr Lys Ala Ile Pro
 180 185 190
 Val Ala Gln Asp Leu Asn Ala Pro Ser Asp Trp Asp Ser Arg Gly Lys
 195 200 205
 Asp Ser Tyr Glu Thr Ser Gln Leu Asp Asp Gln Ser Ala Glu Thr His
 210 215 220
 Ser His Lys Gln Ser Arg Leu Tyr Lys Arg Lys Ala Asn Asp Glu Ser
 225 230 235 240
 Asn Glu His Ser Asp Val Ile Asp Ser Gln Glu Leu Ser Lys Val Ser
 245 250 255
 Arg Glu Phe His Ser His Glu Phe His Ser His Glu Asp Met Leu Val

Sequence listing.txt

260
 Val Asp Pro Lys Ser Lys Glu Glu Asp Lys His Leu Lys Phe Arg Ile
 275
 Ser His Glu Leu Asp Ser Ala Ser Ser Glu Val Asn
 290 295 300

<210> 76
 <211> 871
 <212> PRT
 <213> Homo sapiens

<400> 76
 Met Lys Tyr Ser Cys Cys Ala Leu Val Leu Ala Val Leu Gly Thr Glu
 1 5 10 15
 Leu Leu Gly Ser Leu Cys Ser Thr Val Arg Ser Pro Arg Phe Arg Gly
 20 25 30
 Arg Ile Gln Gln Glu Arg Lys Asn Ile Arg Pro Asn Ile Ile Leu Val
 35 40 45
 Leu Thr Asp Asp Gln Asp Val Glu Leu Gly Ser Leu Gln Val Met Asn
 50 55 60
 Lys Thr Arg Lys Ile Met Glu His Gly Gly Ala Thr Phe Ile Asn Ala
 65 70 75 80
 Phe Val Thr Thr Pro Met Cys Cys Pro Ser Arg Ser Ser Met Leu Thr
 85 90 95
 Gly Lys Tyr Val His Asn His Asn Val Tyr Thr Asn Asn Glu Asn Cys
 100 105 110
 Ser Ser Pro Ser Trp Gln Ala Met His Glu Pro Arg Thr Phe Ala Val
 115 120 125
 Tyr Leu Asn Asn Thr Gly Tyr Arg Thr Ala Phe Phe Gly Lys Tyr Leu
 130 135 140
 Asn Glu Tyr Asn Gly Ser Tyr Ile Pro Pro Gly Trp Arg Glu Trp Leu
 145 150 155 160
 Gly Leu Ile Lys Asn Ser Arg Phe Tyr Asn Tyr Thr Val Cys Arg Asn
 165 170 175
 Gly Ile Lys Glu Lys His Gly Phe Asp Tyr Ala Lys Asp Tyr Phe Thr
 180 185 190
 Asp Leu Ile Thr Asn Glu Ser Ile Asn Tyr Phe Lys Met Ser Lys Arg
 195 200 205
 Met Tyr Pro His Arg Pro Val Met Met Val Ile Ser His Ala Ala Pro
 210 215 220
 His Gly Pro Glu Asp Ser Ala Pro Gln Phe Ser Lys Leu Tyr Pro Asn
 225 230 235 240
 Ala Ser Gln His Ile Thr Pro Ser Tyr Asn Tyr Ala Pro Asn Met Asp
 245 250 255
 Lys His Trp Ile Met Gln Tyr Thr Gly Pro Met Leu Pro Ile His Met
 260 265 270
 Glu Phe Thr Asn Ile Leu Gln Arg Lys Arg Leu Gln Thr Leu Met Ser
 275 280 285
 Val Asp Asp Ser Val Glu Arg Leu Tyr Asn Met Leu Val Glu Thr Gly
 290 295 300
 Glu Leu Glu Asn Thr Tyr Ile Ile Tyr Thr Ala Asp His Gly Tyr His
 305 310 315 320
 Ile Gly Gln Phe Gly Leu Val Lys Gly Lys Ser Met Pro Tyr Asp Phe
 325 330 335
 Asp Ile Arg Val Pro Phe Phe Ile Arg Gly Pro Ser Val Glu Pro Gly
 340 345 350
 Ser Ile Val Pro Gln Ile Val Leu Asn Ile Asp Leu Ala Pro Thr Ile
 355 360 365
 Leu Asp Ile Ala Gly Leu Asp Thr Pro Pro Asp Val Asp Gly Lys Ser
 370 375 380
 Val Leu Lys Leu Leu Asp Pro Glu Lys Pro Gly Asn Arg Phe Arg Thr
 385 390 395 400

Sequence listing.txt

Asn Lys Lys Ala Lys Ile Trp Arg Asp Thr Phe Leu Val Glu Arg Gly
 405 410 415
 Lys Phe Leu Arg Lys Lys Glu Glu Ser Ser Lys Asn Ile Gln Gln Ser
 420 425 430
 Asn His Leu Pro Lys Tyr Glu Arg Val Lys Glu Leu Cys Gln Gln Ala
 435 440 445
 Arg Tyr Gln Thr Ala Cys Glu Gln Pro Gly Gln Lys Trp Gln Cys Ile
 450 455 460
 Glu Asp Thr Ser Gly Lys Leu Arg Ile His Lys Cys Lys Gly Pro Ser
 465 470 475 480
 Asp Leu Leu Thr Val Arg Gln Ser Thr Arg Asn Leu Tyr Ala Arg Gly
 485 490 495
 Phe His Asp Lys Asp Lys Glu Cys Ser Cys Arg Glu Ser Gly Tyr Arg
 500 505 510
 Ala Ser Arg Ser Gln Arg Lys Ser Gln Arg Gln Phe Leu Arg Asn Gln
 515 520 525
 Gly Thr Pro Lys Tyr Lys Pro Arg Phe Val His Thr Arg Gln Thr Arg
 530 535 540
 Ser Leu Ser Val Glu Phe Glu Gly Glu Ile Tyr Asp Ile Asn Leu Glu
 545 550 555 560
 Glu Glu Glu Glu Leu Gln Val Leu Gln Pro Arg Asn Ile Ala Lys Arg
 565 570 575
 His Asp Glu Gly His Lys Gly Pro Arg Asp Leu Gln Ala Ser Ser Gly
 580 585 590
 Gly Asn Arg Gly Arg Met Leu Ala Asp Ser Ser Asn Ala Val Gly Pro
 595 600 605
 Pro Thr Thr Val Arg Val Thr His Lys Cys Phe Ile Leu Pro Asn Asp
 610 615 620
 Ser Ile His Cys Glu Arg Glu Leu Tyr Gln Ser Ala Arg Ala Trp Lys
 625 630 635 640
 Asp His Lys Ala Tyr Ile Asp Lys Glu Ile Glu Ala Leu Gln Asp Lys
 645 650 655
 Ile Lys Asn Leu Arg Glu Val Arg Gly His Leu Lys Arg Arg Lys Pro
 660 665 670
 Glu Glu Cys Ser Cys Ser Lys Gln Ser Tyr Tyr Asn Lys Glu Lys Gly
 675 680 685
 Val Lys Lys Gln Glu Lys Leu Lys Ser His Leu His Pro Phe Lys Glu
 690 695 700
 Ala Ala Gln Glu Val Asp Ser Lys Leu Gln Leu Phe Lys Glu Asn Asn
 705 710 715 720
 Arg Arg Arg Lys Lys Glu Arg Lys Glu Lys Arg Arg Gln Arg Lys Gly
 725 730 735
 Glu Glu Cys Ser Leu Pro Gly Leu Thr Cys Phe Thr His Asp Asn Asn
 740 745 750
 His Trp Gln Thr Ala Pro Phe Trp Asn Leu Gly Ser Phe Cys Ala Cys
 755 760 765
 Thr Ser Ser Asn Asn Asn Thr Tyr Trp Cys Leu Arg Thr Val Asn Glu
 770 775 780
 Thr His Asn Phe Leu Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr
 785 790 795 800
 Phe Asp Met Asn Thr Asp Pro Tyr Gln Leu Thr Asn Thr Val His Thr
 805 810 815
 Val Glu Arg Gly Ile Leu Asn Gln Leu His Val Gln Leu Met Glu Leu
 820 825 830
 Arg Ser Cys Gln Gly Tyr Lys Gln Cys Asn Pro Arg Pro Lys Asn Leu
 835 840 845
 Asp Val Gly Asn Lys Asp Gly Gly Ser Tyr Asp Leu His Arg Gly Gln
 850 855 860
 Leu Trp Asp Gly Trp Glu Gly
 865 870

Sequence listing.txt

<211> 470

<212> PRT

<213> Homo sapiens

<400> 77

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Met Lys Phe Leu Leu Ile Leu Leu Leu Gln Ala Thr Ala Ser Gly Ala
 1      5      10      15
Leu Pro Leu Asn Ser Ser Thr Ser Leu Glu Lys Asn Asn Val Leu Phe
      20      25      30
Gly Glu Arg Tyr Leu Glu Lys Phe Tyr Gly Leu Glu Ile Asn Lys Leu
      35      40      45
Pro Val Thr Lys Met Lys Tyr Ser Gly Asn Leu Met Lys Glu Lys Ile
      50      55      60
Gln Glu Met Gln His Phe Leu Gly Leu Lys Val Thr Gly Gln Leu Asp
65      70      75      80
Thr Ser Thr Leu Glu Met Met His Ala Pro Arg Cys Gly Val Pro Asp
      85      90      95
Leu His His Phe Arg Glu Met Pro Gly Gly Pro Val Trp Arg Lys His
      100      105      110
Tyr Ile Thr Tyr Arg Ile Asn Asn Tyr Thr Pro Asp Met Asn Arg Glu
      115      120      125
Asp Val Asp Tyr Ala Ile Arg Lys Ala Phe Gln Val Trp Ser Asn Val
130      135      140
Thr Pro Leu Lys Phe Ser Lys Ile Asn Thr Gly Met Ala Asp Ile Leu
145      150      155      160
Val Val Phe Ala Arg Gly Ala His Gly Asp Phe His Ala Phe Asp Gly
      165      170      175
Lys Gly Gly Ile Leu Ala His Ala Phe Gly Pro Gly Ser Gly Ile Gly
      180      185      190
Gly Asp Ala His Phe Asp Glu Asp Glu Phe Trp Thr Thr His Ser Gly
195      200      205
Gly Thr Asn Leu Phe Leu Thr Ala Val His Glu Ile Gly His Ser Leu
210      215      220
Gly Leu Gly His Ser Ser Asp Pro Lys Ala Val Met Phe Pro Thr Tyr
225      230      235      240
Lys Tyr Val Asp Ile Asn Thr Phe Arg Leu Ser Ala Asp Asp Ile Arg
      245      250      255
Gly Ile Gln Ser Leu Tyr Gly Asp Pro Lys Glu Asn Gln Arg Leu Pro
      260      265      270
Asn Pro Asp Asn Ser Glu Pro Ala Leu Cys Asp Pro Asn Leu Ser Phe
275      280      285
Asp Ala Val Thr Thr Val Gly Asn Lys Ile Phe Phe Phe Lys Asp Arg
290      295      300
Phe Phe Trp Leu Lys Val Ser Glu Arg Pro Lys Thr Ser Val Asn Leu
305      310      315      320
Ile Ser Ser Leu Trp Pro Thr Leu Pro Ser Gly Ile Glu Ala Ala Tyr
      325      330      335
Glu Ile Glu Ala Arg Asn Gln Val Phe Leu Phe Lys Asp Asp Lys Tyr
      340      345      350
Trp Leu Ile Ser Asn Leu Arg Pro Glu Pro Asn Tyr Pro Lys Ser Ile
355      360      365
His Ser Phe Gly Phe Pro Asn Phe Val Lys Lys Ile Asp Ala Ala Val
370      375      380
Phe Asn Pro Arg Phe Tyr Arg Thr Tyr Phe Phe Val Asp Asn Gln Tyr
385      390      395      400
Trp Arg Tyr Asp Glu Arg Arg Gln Met Met Asp Pro Gly Tyr Pro Lys
      405      410      415
Leu Ile Thr Lys Asn Phe Gln Gly Ile Gly Pro Lys Ile Asp Ala Val
      420      425      430
Phe Tyr Ser Lys Asn Lys Tyr Tyr Tyr Phe Phe Gln Gly Ser Asn Gln
435      440      445
Phe Glu Tyr Asp Phe Leu Leu Gln Arg Ile Thr Lys Thr Leu Lys Ser
450      455      460

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Sequence Listing.txt

Asn Ser Trp Phe Gly Cys
465 470

<210> 78
<211> 165
<212> PRT
<213> Homo sapiens

<400> 78
Met Ala Pro Asn Ala Ser Cys Leu Cys Val His Val Arg Ser Glu Glu
1 5 10 15
Trp Asp Leu Met Thr Phe Asp Ala Asn Pro Tyr Asp Ser Val Lys Lys
20 25 30
Ile Lys Glu His Val Arg Ser Lys Thr Lys Val Pro Val Gln Asp Gln
35 40 45
Val Leu Leu Leu Gly Ser Lys Ile Leu Lys Pro Arg Arg Ser Leu Ser
50 55 60
Ser Tyr Gly Ile Asp Lys Glu Lys Thr Ile His Leu Thr Leu Lys Val
65 70 75 80
Val Lys Pro Ser Asp Glu Glu Leu Pro Leu Phe Leu Val Glu Ser Gly
85 90 95
Asp Glu Ala Lys Arg His Leu Leu Gln Val Arg Arg Ser Ser Val
100 105 110
Ala Gln Val Lys Ala Met Ile Glu Thr Lys Thr Gly Ile Ile Pro Glu
115 120 125
Thr Gln Ile Val Thr Cys Asn Gly Lys Arg Leu Glu Asp Gly Lys Met
130 135 140
Met Ala Asp Tyr Gly Ile Arg Lys Gly Asn Leu Phe Leu Ala Ser
145 150 155 160
Tyr Cys Ile Gly Gly
165

<210> 79
<211> 1464
<212> PRT
<213> Homo sapiens

<400> 79
Met Phe Ser Phe Val Asp Leu Arg Leu Leu Leu Leu Ala Ala Thr
1 5 10 15
Ala Leu Leu Thr His Gly Gln Glu Glu Gly Gln Val Glu Gly Gln Asp
20 25 30
Glu Asp Ile Pro Pro Ile Thr Cys Val Gln Asn Gly Leu Arg Tyr His
35 40 45
Asp Arg Asp Val Trp Lys Pro Glu Pro Cys Arg Ile Cys Val Cys Asp
50 55 60
Asn Gly Lys Val Leu Cys Asp Asp Val Ile Cys Asp Glu Thr Lys Asn
65 70 75 80
Cys Pro Gly Ala Glu Val Pro Glu Gly Glu Cys Cys Pro Val Cys Pro
85 90 95
Asp Gly Ser Glu Ser Pro Thr Asp Gln Glu Thr Thr Gly Val Glu Gly
100 105 110
Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Arg Gly Pro Ala Gly Pro
115 120 125
Pro Gly Arg Asp Gly Ile Pro Gly Gln Pro Gly Leu Pro Gly Pro Pro
130 135 140
Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Leu Gly Gly Asn Phe Ala
145 150 155 160
Pro Gln Leu Ser Tyr Gly Tyr Asp Glu Lys Ser Thr Gly Gly Ile Ser
165 170 175
Val Pro Gly Pro Met Gly Pro Ser Gly Pro Arg Gly Leu Pro Gly Pro

185

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Sequence listing.txt

Gly Pro Pro Gly Pro Ala Gly Pro Arg Gly Ala Asn Gly Ala Pro Gly
 690 695 700
 Asn Asp Gly Ala Lys Gly Asp Ala Gly Ala Pro Gly Ala Pro Gly Ser
 705 710 715 720
 Gln Gly Ala Pro Gly Leu Gln Gly Met Pro Gly Glu Arg Gly Ala Ala
 725 730 735
 Gly Leu Pro Gly Pro Lys Gly Asp Arg Gly Asp Ala Gly Pro Lys Gly
 740 745 750
 Ala Asp Gly Ser Pro Gly Lys Asp Gly Val Arg Gly Leu Thr Gly Pro
 755 760 765
 Ile Gly Pro Pro Gly Pro Ala Gly Ala Pro Gly Asp Lys Gly Glu Ser
 770 775 780
 Gly Pro Ser Gly Pro Ala Gly Pro Thr Gly Ala Arg Gly Ala Pro Gly
 785 790 795 800
 Asp Arg Gly Glu Pro Gly Pro Pro Gly Pro Ala Gly Phe Ala Gly Pro
 805 810 815
 Pro Gly Ala Asp Gly Gln Pro Gly Ala Lys Gly Glu Pro Gly Asp Ala
 820 825 830
 Gly Ala Lys Gly Asp Ala Gly Pro Pro Gly Pro Ala Gly Pro Ala Gly
 835 840 845
 Pro Pro Gly Pro Ile Gly Asn Val Gly Ala Pro Gly Ala Lys Gly Ala
 850 855 860
 Arg Gly Ser Ala Gly Pro Gly Ala Thr Gly Phe Pro Gly Ala Ala
 865 870 875 880
 Gly Arg Val Gly Pro Pro Gly Pro Ser Gly Asn Ala Gly Pro Pro Gly
 885 890 895
 Pro Pro Gly Pro Ala Gly Lys Glu Gly Gly Lys Gly Pro Arg Gly Glu
 900 905 910
 Thr Gly Pro Ala Gly Arg Pro Gly Glu Val Gly Pro Pro Gly Pro Pro
 915 920 925
 Gly Pro Ala Gly Glu Lys Gly Ser Pro Gly Ala Asp Gly Pro Ala Gly
 930 935 940
 Ala Pro Gly Thr Pro Gly Pro Gln Gly Ile Ala Gly Gln Arg Gly Val
 945 950 955 960
 Val Gly Leu Pro Gly Gln Arg Gly Glu Arg Gly Phe Pro Gly Leu Pro
 965 970 975
 Gly Pro Ser Gly Glu Pro Gly Lys Gln Gly Pro Ser Gly Ala Ser Gly
 980 985 990
 Glu Arg Gly Pro Pro Gly Pro Met Gly Pro Pro Gly Leu Ala Gly Pro
 995 1000 1005
 Pro Gly Glu Ser Gly Arg Glu Gly Ala Pro Ala Ala Glu Gly Ser Pro
 1010 1015 1020
 Gly Arg Asp Gly Ser Pro Gly Ala Lys Gly Asp Arg Gly Glu Thr Gly
 1025 1030 1035 1040
 Pro Ala Gly Pro Pro Gly Ala Pro Gly Ala Pro Gly Ala Pro Gly Pro
 1045 1050 1055
 Val Gly Pro Ala Gly Lys Ser Gly Asp Arg Gly Glu Thr Gly Pro Ala
 1060 1065 1070
 Gly Pro Ala Gly Pro Val Gly Pro Val Gly Ala Arg Gly Pro Ala Gly
 1075 1080 1085
 Pro Gln Gly Pro Arg Gly Asp Lys Gly Glu Thr Gly Glu Gln Gly Asp
 1090 1095 1100
 Arg Gly Ile Lys Gly His Arg Gly Phe Ser Gly Leu Gln Gly Pro Pro
 1105 1110 1115 1120
 Gly Pro Pro Gly Ser Pro Gly Glu Gln Gly Pro Ser Gly Ala Ser Gly
 1125 1130 1135
 Pro Ala Gly Pro Arg Gly Pro Pro Gly Ser Ala Gly Ala Pro Gly Lys
 1140 1145 1150
 Asp Gly Leu Asn Gly Leu Pro Gly Pro Ile Gly Pro Pro Gly Pro Arg
 1155 1160 1165
 Gly Arg Thr Gly Asp Ala Gly Pro Val Gly Pro Pro Gly Pro Pro Gly
 1170 1175 1180
 Pro Pro Gly Pro Pro Gly Pro Pro Ser Ala Gly Phe Asp Phe Ser Phe

Sequence listing.txt

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1185          1190          1195          1200
Leu Pro Gln Pro Pro Gln Glu Lys Ala His Asp Gly Gly Arg Tyr Tyr
          1205          1210          1215
Arg Ala Asp Asp Ala Asn Val Val Arg Asp Arg Asp Leu Glu Val Asp
          1220          1225          1230
Thr Thr Leu Lys Ser Leu Ser Gln Gln Ile Glu Asn Ile Arg Ser Pro
          1235          1240          1245
Glu Gly Ser Arg Lys Asn Pro Ala Arg Thr Cys Arg Asp Leu Lys Met
          1250          1255          1260
Cys His Ser Asp Trp Lys Ser Gly Glu Tyr Trp Ile Asp Pro Asn Gln
          1265          1270          1275          1280
Gly Cys Asn Leu Asp Ala Ile Lys Val Phe Cys Asn Met Glu Thr Gly
          1285          1290          1295
Glu Thr Cys Val Tyr Pro Thr Gln Pro Ser Val Ala Gln Lys Asn Trp
          1300          1305          1310
Tyr Ile Ser Lys Asn Pro Lys Asp Lys Arg His Val Trp Phe Gly Glu
          1315          1320          1325
Ser Met Thr Asp Gly Phe Gln Phe Glu Tyr Gly Gly Gln Gly Ser Asp
          1330          1335          1340
Pro Ala Asp Val Ala Ile Gln Leu Thr Phe Leu Arg Leu Met Ser Thr
          1345          1350          1355          1360
Glu Ala Ser Gln Asn Ile Thr Tyr His Cys Lys Asn Ser Val Ala Tyr
          1365          1370          1375
Met Asp Gln Gln Thr Gly Asn Leu Lys Lys Ala Leu Leu Lys Gly
          1380          1385          1390
Ser Asn Glu Ile Glu Ile Arg Ala Glu Gly Asn Ser Arg Phe Thr Tyr
          1395          1400          1405
Ser Val Thr Val Asp Gly Cys Thr Ser His Thr Gly Ala Trp Gly Lys
          1410          1415          1420
Thr Val Ile Glu Tyr Lys Thr Thr Lys Ser Ser Arg Leu Pro Ile Ile
          1425          1430          1435          1440
Asp Val Ala Pro Leu Asp Val Gly Ala Pro Asp Gln Glu Phe Gly Phe
          1445          1450          1455
Asp Val Gly Pro Val Cys Phe Leu
          1460

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<210> 80
<211> 338
<212> PRT
<213> Homo sapiens

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<400> 80
Met Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr
 1          5          10          15
Ser Gly Gln Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln
          20          25          30
Ser Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro
          35          40          45
Ser Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val
          50          55          60
Pro Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Gln Ile Asp His
 65          70          75          80
Ile Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile
          85          90          95
Leu Asp His Asn Leu Leu Glu Asn Ser Lys Ile Lys Gly Arg Val Phe
          100          105          110
Ser Lys Leu Lys Gln Leu Lys Lys Leu His Ile Asn His Asn Asn Leu
          115          120          125
Thr Glu Ser Val Gly Pro Leu Pro Lys Ser Leu Glu Asp Leu Gln Leu
          130          135          140
Thr His Asn Lys Ile Thr Lys Leu Gly Ser Phe Glu Gly Leu Val Asn
 145          150          155          160

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Sequence listing.txt

Leu Thr Phe Ile His Leu Gln His Asn Arg Leu Lys Glu Asp Ala Val
 165 170 175
 Ser Ala Ala Phe Lys Gly Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser
 180 185 190
 Phe Asn Gln Ile Ala Arg Leu Pro Ser Gly Leu Pro Val Ser Leu Leu
 195 200 205
 Thr Leu Tyr Leu Asp Asn Asn Lys Ile Ser Asn Ile Pro Asp Glu Tyr
 210 215 220
 Phe Lys Arg Phe Asn Ala Leu Gln Tyr Leu Arg Leu Ser His Asn Glu
 225 230 235 240
 Leu Ala Asp Ser Gly Ile Pro Gly Asn Ser Phe Asn Val Ser Ser Leu
 245 250 255
 Val Glu Leu Asp Leu Ser Tyr Asn Lys Leu Lys Asn Ile Pro Thr Val
 260 265 270
 Asn Glu Asn Leu Glu Asn Tyr Tyr Leu Glu Val Asn Gln Leu Glu Lys
 275 280 285
 Phe Asp Ile Lys Ser Phe Cys Lys Ile Leu Gly Pro Leu Ser Tyr Ser
 290 295 300
 Lys Ile Lys His Leu Arg Leu Asp Gly Asn Arg Ile Ser Glu Thr Ser
 305 310 315 320
 Leu Pro Pro Asp Met Tyr Glu Cys Leu Arg Val Ala Asn Glu Val Thr
 325 330 335
 Leu Asn

<210> 81
 <211> 589
 <212> PRT
 <213> Homo sapiens

<400> 81
 Met Ser Val Ser Val His Glu Asn Arg Lys Ser Arg Ala Ser Ser Gly
 1 5 10 15
 Ser Ile Asn Ile Tyr Leu Phe His Lys Ser Ser Tyr Ala Asp Ser Val
 20 25 30
 Leu Thr His Leu Asn Leu Leu Arg Gln Gln Arg Leu Phe Thr Asp Val
 35 40 45
 Leu Leu His Ala Gly Asn Arg Thr Phe Pro Cys His Arg Ala Val Leu
 50 55 60
 Ala Ala Cys Ser Arg Tyr Phe Glu Ala Met Phe Ser Gly Gly Leu Lys
 65 70 75 80
 Glu Ser Gln Asp Ser Glu Val Asn Phe Asp Asn Ser Ile His Pro Glu
 85 90 95
 Val Leu Glu Leu Leu Asp Tyr Ala Tyr Ser Ser Arg Val Ile Ile
 100 105 110
 Asn Glu Glu Asn Ala Glu Ser Leu Leu Glu Ala Gly Asp Met Leu Glu
 115 120 125
 Phe Gln Asp Ile Arg Asp Ala Cys Ala Glu Phe Leu Glu Lys Asn Leu
 130 135 140
 His Pro Thr Asn Cys Leu Gly Met Leu Leu Leu Ser Asp Ala His Gln
 145 150 155 160
 Cys Thr Lys Leu Tyr Glu Leu Ser Trp Arg Met Cys Leu Ser Asn Phe
 165 170 175
 Gln Thr Ile Arg Lys Asn Glu Asp Phe Leu Gln Leu Pro Gln Asp Met
 180 185 190
 Val Val Gln Leu Leu Ser Ser Glu Glu Leu Glu Thr Glu Asp Glu Arg
 195 200 205
 Leu Val Tyr Glu Ser Ala Ile Asn Trp Ile Ser Tyr Asp Leu Lys Lys
 210 215 220
 Arg Tyr Cys Tyr Leu Pro Glu Leu Leu Gln Thr Val Arg Leu Ala Leu
 225 230 235 240
 Leu Pro Ala Ile Tyr Leu Met Glu Asn Val Ala Met Glu Glu Leu Ile

Sequence listing.txt

```

      245      250      255
Thr Lys Gln Arg Lys Ser Lys Glu Ile Val Glu Glu Ala Ile Arg Cys
      260      265      270
Lys Leu Lys Ile Leu Gln Asn Asp Gly Val Val Thr Ser Leu Cys Ala
      275      280      285
Arg Pro Arg Lys Thr Gly His Ala Leu Phe Leu Leu Gly Gln Thr
      290      295      300
Phe Met Cys Asp Lys Leu Tyr Leu Val Asp Gln Lys Ala Lys Glu Ile
      305      310      315      320
Ile Pro Lys Ala Asp Ile Pro Ser Pro Arg Lys Glu Phe Ser Ala Cys
      325      330      335
Ala Ile Gly Cys Lys Val Tyr Ile Thr Gly Gly Arg Gly Ser Glu Asn
      340      345      350
Gly Val Ser Lys Asp Val Trp Val Tyr Asp Thr Leu His Glu Glu Trp
      355      360      365
Ser Lys Ala Ala Pro Met Leu Val Ala Arg Phe Gly His Gly Ser Ala
      370      375      380
Glu Leu Lys His Cys Leu Tyr Val Val Gly Gly His Thr Ala Ala Thr
      385      390      395      400
Gly Cys Leu Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu His
      405      410      415
Tyr Asp Pro Thr Ile Asn Lys Trp Thr Met Val Ala Pro Leu Arg Glu
      420      425      430
Gly Val Ser Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Ala
      435      440      445
Phe Gly Gly Thr Ser Val Ser His Asp Lys Leu Pro Lys Val Gln Cys
      450      455      460
Tyr Asp Gln Cys Glu Asn Arg Trp Thr Val Pro Ala Thr Cys Pro Gln
      465      470      475      480
Pro Trp Arg Tyr Thr Ala Ala Ala Val Leu Gly Asn Gln Ile Phe Ile
      485      490      495
Met Gly Gly Asp Thr Glu Phe Ser Ala Cys Ser Ala Tyr Lys Phe Asn
      500      505      510
Ser Glu Thr Tyr Gln Trp Thr Lys Val Gly Asp Val Thr Ala Lys Arg
      515      520      525
Met Ser Cys His Ala Val Ala Ser Gly Asn Lys Leu Tyr Val Val Gly
      530      535      540
Gly Tyr Phe Gly Ile Gln Arg Cys Lys Thr Leu Asp Cys Tyr Asp Pro
      545      550      555      560
Thr Leu Asp Val Trp Asn Ser Ile Thr Thr Val Pro Tyr Ser Leu Ile
      565      570      575
Pro Thr Ala Phe Val Ser Thr Trp Lys His Leu Pro Ser
      580      585

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<210> 82
 <211> 193
 <212> PRT
 <213> Homo sapiens

```

<400> 82
Met Ile Arg Cys Gly Leu Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro
  1      5      10      15
Leu Leu Leu Leu Ser Ala Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly
      20      25      30
Arg Gly Trp Leu Gln Ser Ser Asp His Gly Gln Thr Ser Ser Leu Trp
      35      40      45
Trp Lys Cys Ser Gln Glu Gly Gly Ser Gly Ser Tyr Glu Glu Gly
      50      55      60
Cys Gln Ser Leu Met Glu Tyr Ala Trp Gly Arg Ala Ala Ala Ala Met
      65      70      75      80
Leu Phe Cys Gly Phe Ile Ile Leu Val Ile Cys Phe Ile Leu Ser Phe
      85      90      95

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Sequence listing.txt

Phe Ala Leu Cys Gly Pro Gln Met Leu Val Phe Leu Arg Val Ile Gly
 100 105 110
 Gly Leu Leu Ala Leu Ala Ala Val Phe Gln Ile Ile Ser Leu Val Ile
 115 120 125
 Tyr Pro Val Lys Tyr Thr Gln Thr Phe Thr Leu His Ala Asn Pro Ala
 130 135 140
 Val Thr Tyr Ile Tyr Asn Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr
 145 150 155 160
 Ile Ile Leu Ile Gly Cys Ala Phe Phe Phe Cys Cys Leu Leu Asn Tyr
 165 170 175
 Glu Asp Asp Leu Gly Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser
 180 185 190
 Ala

<210> 83
 <211> 423
 <212> PRT
 <213> Homo sapiens

<400> 83
 Met Arg Ser Ser Gly Ala Asp Ala Gly Arg Cys Leu Val Thr Ala Arg
 1 5 10 15
 Ala Pro Gly Ser Val Pro Ala Ser Arg Glu Gly Ser Ala Gly Ser Arg
 20 25 30
 Gly Pro Gly Ala Arg Phe Pro Ala Arg Val Ser Ala Arg Gly Ser Ala
 35 40 45
 Pro Gly Pro Gly Leu Gly Gly Ala Gly Ala Leu Asp Pro Pro Ala Val
 50 55 60
 Val Ala Glu Ser Val Ser Ser Leu Thr Ile Ala Asp Ala Phe Ile Ala
 65 70 75 80
 Ala Gly Glu Ser Ser Ala Pro Thr Pro Pro Arg Pro Ala Leu Pro Arg
 85 90 95
 Arg Phe Ile Cys Ser Phe Pro Asp Cys Ser Ala Asn Tyr Ser Lys Ala
 100 105 110
 Trp Lys Leu Asp Ala His Leu Cys Lys His Thr Gly Glu Arg Pro Phe
 115 120 125
 Val Cys Asp Tyr Glu Gly Cys Gly Lys Ala Phe Ile Arg Asp Tyr His
 130 135 140
 Leu Ser Arg His Ile Leu Thr His Thr Gly Glu Lys Pro Phe Val Cys
 145 150 155 160
 Ala Ala Asn Gly Cys Asp Gln Lys Phe Asn Thr Lys Ser Asn Leu Lys
 165 170 175
 Lys His Phe Glu Arg Lys His Glu Asn Gln Gln Lys Gln Tyr Ile Cys
 180 185 190
 Ser Phe Glu Asp Cys Lys Lys Thr Phe Lys Lys His Gln Gln Leu Lys
 195 200 205
 Ile His Gln Cys Gln Asn Thr Asn Glu Pro Leu Phe Lys Cys Thr Gln
 210 215 220
 Glu Gly Cys Gly Lys His Phe Ala Ser Pro Ser Lys Leu Lys Arg His
 225 230 235 240
 Ala Lys Ala His Glu Gly Tyr Val Cys Gln Lys Gly Cys Ser Phe Val
 245 250 255
 Ala Lys Thr Trp Thr Glu Leu Leu Lys His Val Arg Glu Thr His Lys
 260 265 270
 Glu Glu Ile Leu Cys Glu Val Cys Arg Lys Thr Phe Lys Arg Lys Asp
 275 280 285
 Tyr Leu Lys Gln His Met Lys Thr His Ala Pro Glu Arg Asp Val Cys
 290 295 300
 Arg Cys Pro Arg Glu Gly Cys Gly Arg Thr Tyr Thr Thr Val Phe Asn
 305 310 315 320
 Leu Gln Ser His Ile Leu Ser Phe His Glu Glu Ser Arg Pro Phe Val

Sequence listing.txt

325 330 335
 Cys Glu His Ala Gly Cys Gly Lys Thr Phe Ala Met Lys Gln Ser Leu
 340 345 350
 Thr Arg His Ala Val Val His Asp Pro Asp Lys Lys Lys Met Lys Leu
 355 360 365
 Lys Val Lys Lys Ser Arg Glu Lys Arg Glu Phe Gly Leu Ser Ser Gln
 370 375 380
 Trp Ile Tyr Pro Pro Lys Arg Lys Gln Gly Gln Gly Leu Ser Leu Cys
 385 390 395 400
 Gln Asn Gly Glu Ser Pro Asn Cys Val Glu Asp Lys Met Leu Ser Thr
 405 410 415
 Val Ala Val Leu Thr Leu Gly
 420

<210> 84
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 84
 Met Trp Gln Leu Trp Ala Ser Leu Cys Cys Leu Leu Val Leu Ala Asn
 1 5 10 15
 Ala Arg Ser Arg Pro Ser Phe His Pro Leu Ser Asp Glu Leu Val Asn
 20 25 30
 Tyr Val Asn Lys Arg Asn Thr Thr Trp Gln Ala Gly His Asn Phe Tyr
 35 40 45
 Asn Val Asp Met Ser Tyr Leu Lys Arg Leu Cys Gly Thr Phe Leu Gly
 50 55 60
 Gly Pro Lys Pro Pro Gln Arg Val Met Phe Thr Glu Asp Leu Lys Leu
 65 70 75 80
 Pro Ala Ser Phe Asp Ala Arg Glu Gln Trp Pro Gln Cys Pro Thr Ile
 85 90 95
 Lys Glu Ile Arg Asp Gln Gly Ser Cys Gly Ser Cys Trp Ala Phe Gly
 100 105 110
 Ala Val Glu Ala Ile Ser Asp Arg Ile Cys Ile His Thr Asn Ala His
 115 120 125
 Val Ser Val Glu Val Ser Ala Glu Asp Leu Leu Thr Cys Cys Gly Ser
 130 135 140
 Met Cys Gly Asp Gly Cys Asn Gly Gly Tyr Pro Ala Glu Ala Trp Asn
 145 150 155 160
 Phe Trp Thr Arg Lys Gly Leu Val Ser Gly Gly Leu Tyr Glu Ser His
 165 170 175
 Val Gly Cys Arg Pro Tyr Ser Ile Pro Pro Cys Glu His His Val Asn
 180 185 190
 Gly Ser Arg Pro Pro Cys Thr Gly Glu Gly Asp Thr Pro Lys Cys Ser
 195 200 205
 Lys Ile Cys Glu Pro Gly Tyr Ser Pro Thr Tyr Lys Gln Asp Lys His
 210 215 220
 Tyr Gly Tyr Asn Ser Tyr Ser Val Ser Asn Ser Glu Lys Asp Ile Met
 225 230 235 240
 Ala Glu Ile Tyr Lys Asn Gly Pro Val Glu Gly Ala Phe Ser Val Tyr
 245 250 255
 Ser Asp Phe Leu Leu Tyr Lys Ser Gly Val Tyr Gln His Val Thr Gly
 260 265 270
 Glu Met Met Gly Gly His Ala Ile Arg Ile Leu Gly Trp Gly Val Glu
 275 280 285
 Asn Gly Thr Pro Tyr Trp Leu Val Ala Asn Ser Trp Asn Thr Asp Trp
 290 295 300
 Gly Asp Asn Gly Phe Phe Lys Ile Leu Arg Gly Gln Asp His Cys Gly
 305 310 315 320
 Ile Glu Ser Glu Val Val Ala Gly Ile Pro Arg Thr Asp Gln Tyr Trp
 325 330 335

Sequence listing.txt

Glu Lys Ile

<210> 85
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 85
 Met Ala Ala Arg Gly Val Ile Ala Pro Val Gly Glu Ser Leu Arg Tyr
 1 5 10 15
 Ala Glu Tyr Leu Gln Pro Ser Ala Lys Arg Pro Asp Ala Asp Val Asp
 20 25 30
 Gln Gln Gly Leu Val Arg Ser Leu Ile Ala Val Gly Leu Gly Val Ala
 35 40 45
 Ala Leu Ala Phe Ala Gly Arg Tyr Ala Phe Arg Ile Trp Lys Pro Leu
 50 55 60
 Glu Gln Val Ile Thr Glu Thr Ala Lys Lys Ile Ser Thr Pro Ser Phe
 65 70 75 80
 Ser Ser Tyr Tyr Lys Gly Gly Phe Glu Gln Lys Met Ser Arg Arg Glu
 85 90 95
 Ala Gly Leu Ile Leu Gly Val Ser Pro Ser Ala Gly Lys Ala Lys Ile
 100 105 110
 Arg Thr Ala His Arg Arg Val Met Ile Leu Asn His Pro Asp Lys Gly
 115 120 125
 Gly Ser Pro Tyr Val Ala Ala Lys Ile Asn Glu Ala Lys Asp Leu Leu
 130 135 140
 Glu Thr Thr Thr Lys His
 145 150

<210> 86
 <211> 1212
 <212> PRT
 <213> Homo sapiens

<400> 86
 Met Glu Pro Arg Pro Thr Ala Pro Ser Ser Gly Ala Pro Gly Leu Ala
 1 5 10 15
 Gly Val Gly Glu Thr Pro Ser Ala Ala Leu Ala Ala Ala Arg Val
 20 25 30
 Glu Leu Pro Gly Thr Ala Val Pro Ser Val Pro Glu Asp Ala Ala Pro
 35 40 45
 Ala Ser Arg Asp Gly Gly Gly Val Arg Asp Glu Gly Pro Ala Ala Ala
 50 55 60
 Gly Asp Gly Leu Gly Arg Pro Leu Gly Pro Thr Pro Ser Gln Ser Arg
 65 70 75 80
 Phe Gln Val Asp Leu Val Ser Glu Asn Ala Gly Arg Ala Ala Ala Ala
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gly Ala Gly Ala Gly
 100 105 110
 Ala Lys Gln Thr Pro Ala Asp Gly Glu Ala Ser Gly Glu Ser Glu Pro
 115 120 125
 Ala Lys Gly Ser Glu Glu Ala Lys Gly Arg Phe Arg Val Asn Phe Val
 130 135 140
 Asp Pro Ala Ala Ser Ser Ser Ala Glu Asp Ser Leu Ser Asp Ala Ala
 145 150 155 160
 Gly Val Gly Val Asp Gly Pro Asn Val Ser Phe Gln Asn Gly Gly Asp
 165 170 175
 Thr Val Leu Ser Glu Gly Ser Ser Leu His Ser Gly Gly Gly Gly Gly
 180 185 190
 Ser Gly His His Gln His Tyr Tyr Tyr Asp Thr His Thr Asn Thr Tyr

Sequence listing.txt

Tyr	Leu	Arg	Thr	Phe	Gly	His	Asn	Thr	Met	Asp	Ala	Val	Pro	Arg	Ile	
Asp	His	Tyr	Arg	His	Thr	Ala	Ala	Gln	Leu	Gly	Glu	Lys	Leu	Leu	Arg	
Pro	Ser	Leu	Ala	Glu	Leu	His	Asp	Glu	Leu	Glu	Lys	Glu	Pro	Phe	Glu	
Asp	Gly	Phe	Ala	Asn	Gly	Glu	Glu	Ser	Thr	Pro	Thr	Arg	Asp	Ala	Val	
Val	Thr	Tyr	Thr	Ala	Glu	Ser	Lys	Gly	Val	Val	Lys	Phe	Gly	Trp	Ile	
Lys	Gly	Val	Leu	Val	Arg	Cys	Met	Leu	Asn	Ile	Trp	Gly	Val	Met	Leu	
Phe	Ile	Arg	Leu	Ser	Trp	Ile	Val	Gly	Gln	Ala	Gly	Ile	Gly	Leu	Ser	
Val	Leu	Val	Ile	Met	Met	Ala	Thr	Val	Val	Thr	Thr	Ile	Thr	Gly	Leu	
Ser	Thr	Ser	Ala	Ile	Ala	Thr	Asn	Gly	Phe	Val	Arg	Gly	Gly	Gly	Ala	
Tyr	Tyr	Leu	Ile	Ser	Arg	Ser	Leu	Gly	Pro	Glu	Phe	Gly	Gly	Ala	Ile	
Gly	Leu	Ile	Phe	Ala	Phe	Ala	Asn	Ala	Val	Ala	Val	Ala	Met	Tyr	Val	
Val	Gly	Phe	Ala	Glu	Thr	Val	Val	Glu	Leu	Leu	Lys	Glu	His	Ser	Ile	
Leu	Met	Ile	Asp	Glu	Ile	Asn	Asp	Ile	Arg	Ile	Ile	Gly	Ala	Ile	Thr	
Val	Val	Ile	Leu	Leu	Gly	Ile	Ser	Val	Ala	Gly	Met	Glu	Trp	Glu	Ala	
Lys	Ala	Gln	Ile	Val	Leu	Leu	Val	Ile	Leu	Leu	Leu	Ala	Ile	Gly	Asp	
Phe	Val	Ile	Gly	Thr	Phe	Ile	Pro	Leu	Glu	Ser	Lys	Lys	Pro	Lys	Gly	
Phe	Phe	Gly	Tyr	Lys	Ser	Glu	Ile	Phe	Asn	Glu	Asn	Phe	Gly	Pro	Asp	
Phe	Arg	Glu	Glu	Glu	Thr	Phe	Phe	Ser	Val	Phe	Ala	Ile	Phe	Phe	Pro	
Ala	Ala	Thr	Gly	Ile	Leu	Ala	Gly	Ala	Asn	Ile	Ser	Gly	Asp	Leu	Ala	
Asp	Pro	Gln	Ser	Ala	Ile	Pro	Lys	Thr	Leu	Leu	Ala	Ile	Leu	Ile	Ile	
Thr	Thr	Leu	Val	Tyr	Val	Gly	Ile	Ala	Val	Ser	Val	Gly	Ser	Cys	Val	
Val	Arg	Asp	Ala	Thr	Gly	Asn	Val	Asn	Asp	Thr	Ile	Val	Thr	Glu	Leu	
Thr	Asn	Cys	Thr	Ser	Ala	Ala	Cys	Lys	Leu	Asn	Phe	Asp	Phe	Ser	Ser	
Cys	Glu	Ser	Ser	Pro	Cys	Ser	Tyr	Gly	Leu	Met	Asn	Asn	Phe	Gln	Val	
Met	Ser	Met	Val	Ser	Gly	Phe	Thr	Pro	Leu	Ile	Ser	Ala	Gly	Ile	Phe	
Ser	Ala	Thr	Leu	Ser	Ser	Ala	Leu	Ala	Ser	Leu	Val	Ser	Ala	Pro	Lys	
Ile	Phe	Gln	Ala	Leu	Cys	Lys	Asp	Asn	Ile	Tyr	Pro	Ala	Phe	Gln	Met	
Phe	Ala	Lys	Gly	Tyr	Gly	Lys	Asn	Asn	Glu	Pro	Leu	Arg	Gly	Tyr	Ile	
Leu	Thr	Phe	Leu	Ile	Ala	Leu	Gly	Phe	Ile	Leu	Ile	Ala	Glu	Leu	Asn	
Val	Ile	Ala	Pro	Ile	Ile	Ser	Asn	Phe	Phe	Leu	Ala	Ser	Tyr	Ala	Leu	
Ile	Asn	Phe	Ser	Val	Phe	His	Ala	Ser	Leu	Ala	Lys	Ser	Pro	Gly	Trp	

Sequence listing.txt

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Arg  Pro  Ala  Phe  Lys  Tyr  Tyr  Asn  Met  Trp  Ile  Ser  Leu  Leu  Gly  Ala
705                                     710 715                                     720
Ile  Leu  Cys  Cys  Ile  Val  Met  Phe  Val  Ile  Asn  Trp  Trp  Ala  Ala  Leu
725                                     730 735
Leu  Thr  Tyr  Val  Ile  Val  Leu  Gly  Leu  Tyr  Ile  Tyr  Val  Thr  Tyr  Lys
740                                     745 750
Lys  Pro  Asp  Val  Asn  Trp  Gly  Ser  Ser  Thr  Gln  Ala  Leu  Thr  Tyr  Leu
755                                     760 765
Asn  Ala  Leu  Gln  His  Ser  Ile  Arg  Leu  Ser  Gly  Val  Glu  Asp  His  Val
770                                     775 780
Lys  Asn  Phe  Arg  Pro  Gln  Cys  Leu  Val  Met  Thr  Gly  Ala  Pro  Asn  Ser
785                                     790 795 800
Arg  Pro  Ala  Leu  Leu  His  Leu  Val  His  Asp  Phe  Thr  Lys  Asn  Val  Gly
805                                     810 815
Leu  Met  Ile  Cys  Gly  His  Val  His  Met  Gly  Pro  Arg  Arg  Gln  Ala  Met
820                                     825 830
Lys  Glu  Met  Ser  Ile  Asp  Gln  Ala  Lys  Tyr  Gln  Arg  Trp  Leu  Ile  Lys
835                                     840 845
Asn  Lys  Met  Lys  Ala  Phe  Tyr  Ala  Pro  Val  His  Ala  Asp  Asp  Leu  Arg
850                                     855 860
Glu  Gly  Ala  Gln  Tyr  Leu  Met  Gln  Ala  Ala  Gly  Leu  Gly  Arg  Met  Lys
865                                     870 875 880
Pro  Asn  Thr  Leu  Val  Leu  Gly  Phe  Lys  Lys  Asp  Trp  Leu  Gln  Ala  Asp
885                                     890 895
Met  Arg  Asp  Val  Asp  Met  Tyr  Ile  Asn  Leu  Phe  His  Asp  Ala  Phe  Asp
900                                     905 910
Ile  Gln  Tyr  Gly  Val  Val  Val  Ile  Arg  Leu  Lys  Glu  Gly  Leu  Asp  Ile
915                                     920 925
Ser  His  Leu  Gln  Gly  Gln  Glu  Glu  Leu  Leu  Ser  Ser  Gln  Glu  Lys  Ser
930                                     935 940
Pro  Gly  Thr  Lys  Asp  Val  Val  Val  Ser  Val  Glu  Tyr  Ser  Lys  Lys  Ser
945                                     950 955 960
Asp  Leu  Asp  Thr  Ser  Lys  Pro  Leu  Ser  Glu  Lys  Pro  Ile  Thr  His  Lys
965                                     970 975
Val  Glu  Glu  Glu  Asp  Gly  Lys  Thr  Ala  Thr  Gln  Pro  Leu  Leu  Lys  Lys
980                                     985 990
Glu  Ser  Lys  Gly  Pro  Ile  Val  Pro  Leu  Asn  Val  Ala  Asp  Gln  Lys  Leu
995                                     1000 1005
Leu  Glu  Ala  Ser  Thr  Gln  Phe  Gln  Lys  Lys  Gln  Gly  Lys  Asn  Thr  Ile
1010                                    1015 1020
Asp  Val  Trp  Trp  Leu  Phe  Asp  Asp  Gly  Gly  Leu  Thr  Leu  Leu  Ile  Pro
1025                                    1030 1035 1040
Tyr  Leu  Leu  Thr  Thr  Lys  Lys  Lys  Trp  Lys  Asp  Cys  Lys  Ile  Arg  Val
1045                                    1050 1055
Phe  Ile  Gly  Gly  Lys  Ile  Asn  Arg  Ile  Asp  His  Asp  Arg  Arg  Ala  Met
1060                                    1065 1070
Ala  Thr  Leu  Leu  Ser  Lys  Phe  Arg  Ile  Asp  Phe  Ser  Asp  Ile  Met  Val
1075                                    1080 1085
Leu  Gly  Asp  Ile  Asn  Thr  Lys  Pro  Lys  Lys  Glu  Asn  Ile  Ile  Ala  Phe
1090                                    1095 1100
Glu  Glu  Ile  Ile  Glu  Pro  Tyr  Arg  Leu  His  Glu  Asp  Asp  Lys  Glu  Gln
1105                                    1110 1115 1120
Asp  Ile  Ala  Asp  Lys  Met  Lys  Glu  Asp  Glu  Pro  Trp  Arg  Ile  Thr  Asp
1125                                    1130 1135
Asn  Glu  Leu  Glu  Leu  Tyr  Lys  Thr  Lys  Thr  Tyr  Arg  Gln  Ile  Arg  Leu
1140                                    1145 1150
Asn  Glu  Leu  Lys  Glu  His  Ser  Thr  Ala  Asn  Ile  Ile  Val  Met
1155                                    1160 1165
Ser  Leu  Pro  Val  Ala  Arg  Lys  Gly  Ala  Val  Ser  Ser  Ala  Leu  Tyr  Met
1170                                    1175 1180
Ala  Trp  Leu  Glu  Ala  Leu  Ser  Lys  Asp  Leu  Pro  Pro  Ile  Leu  Leu  Val
1185                                    1190 1195 1200
Arg  Gly  Asn  His  Gln  Ser  Val  Leu  Thr  Phe  Tyr  Ser

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Sequence listing.txt
1210

1205

<210> 87
<211> 230
<212> PRT
<213> Homo sapiens

<400> 87

Met	Asn	Glu	Met	Tyr	Leu	Arg	Cys	Asp	His	Glu	Asn	Gln	Tyr	Ala	Gln
1				5					10					15	
Trp	Met	Ala	Ala	Cys	Met	Leu	Ala	Ser	Lys	Gly	Lys	Thr	Met	Ala	Asp
			20					25					30		
Ser	Ser	Tyr	Gln	Pro	Glu	Val	Leu	Asn	Ile	Leu	Ser	Phe	Leu	Arg	Met
		35					40					45			
Lys	Asn	Arg	Asn	Ser	Ala	Ser	Gln	Val	Ala	Ser	Ser	Leu	Glu	Asn	Met
	50					55					60				
Asp	Met	Asn	Pro	Glu	Cys	Phe	Val	Ser	Pro	Arg	Cys	Ala	Lys	Arg	His
65					70				75						80
Lys	Ser	Lys	Gln	Leu	Ala	Ala	Arg	Ile	Leu	Glu	Ala	His	Gln	Asn	Val
				85					90					95	
Ala	Gln	Met	Pro	Leu	Val	Glu	Ala	Lys	Leu	Arg	Phe	Ile	Gln	Ala	Trp
			100					105					110		
Gln	Ser	Leu	Pro	Glu	Phe	Gly	Leu	Thr	Tyr	Tyr	Leu	Val	Arg	Phe	Lys
		115					120					125			
Gly	Ser	Lys	Lys	Asp	Asp	Ile	Leu	Gly	Val	Ser	Tyr	Asn	Arg	Leu	Ile
		130				135					140				
Lys	Ile	Asp	Ala	Ala	Thr	Gly	Ile	Pro	Val	Thr	Thr	Trp	Arg	Phe	Thr
145					150				155						160
Asn	Ile	Lys	Gln	Trp	Asn	Val	Asn	Trp	Glu	Thr	Arg	Gln	Val	Val	Ile
				165					170					175	
Glu	Phe	Asp	Gln	Asn	Val	Phe	Thr	Ala	Phe	Thr	Cys	Leu	Ser	Ala	Asp
			180					185				190			
Cys	Lys	Ile	Val	His	Glu	Tyr	Ile	Gly	Gly	Tyr	Ile	Phe	Leu	Ser	Thr
		195					200					205			
Arg	Ser	Lys	Asp	Gln	Asn	Glu	Thr	Leu	Asp	Glu	Asp	Leu	Phe	His	Lys
	210					215					220				
Leu	Thr	Gly	Gly	Gln	Asp										
225					230										

<210> 88
<211> 383
<212> PRT
<213> Homo sapiens

<400> 88

Met	Glu	Ala	Leu	Gly	Lys	Leu	Lys	Gln	Phe	Asp	Ala	Tyr	Pro	Lys	Thr
1				5					10					15	
Leu	Glu	Asp	Phe	Arg	Val	Lys	Thr	Cys	Gly	Gly	Ala	Thr	Val	Thr	Ile
			20					25					30		
Val	Ser	Gly	Leu	Leu	Met	Leu	Leu	Phe	Leu	Ser	Glu	Leu	Gln	Tyr	
		35					40				45				
Tyr	Leu	Thr	Thr	Glu	Val	His	Pro	Glu	Leu	Tyr	Val	Asp	Lys	Ser	Arg
	50					55					60				
Gly	Asp	Lys	Leu	Lys	Ile	Asn	Ile	Asp	Val	Leu	Phe	Pro	His	Met	Pro
65					70				75						80
Cys	Ala	Tyr	Leu	Ser	Ile	Asp	Ala	Met	Asp	Val	Ala	Gly	Glu	Gln	Gln
				85					90					95	
Leu	Asp	Val	Glu	His	Asn	Leu	Phe	Lys	Gln	Arg	Leu	Asp	Lys	Asp	Gly
			100					105				110			
Ile	Pro	Val	Ser	Ser	Glu	Ala	Glu	Arg	His	Glu	Leu	Gly	Lys	Val	Glu
		115					120					125			

Sequence listing.txt

Val	Thr	Val	Phe	Asp	Pro	Asp	Ser	Leu	Asp	Pro	Asp	Arg	Cys	Glu	Ser
	130					135					140				
Cys	Tyr	Gly	Ala	Glu	Ala	Glu	Asp	Ile	Lys	Cys	Cys	Asn	Thr	Cys	Glu
145					150					155					160
Asp	Val	Arg	Glu	Ala	Tyr	Arg	Arg	Arg	Gly	Trp	Ala	Phe	Lys	Asn	Pro
				165					170					175	
Asp	Thr	Ile	Glu	Gln	Cys	Arg	Arg	Glu	Gly	Phe	Ser	Gln	Lys	Met	Gln
			180					185					190		
Glu	Gln	Lys	Asn	Glu	Gly	Cys	Gln	Val	Tyr	Gly	Phe	Leu	Glu	Val	Asn
		195					200					205			
Lys	Val	Ala	Gly	Asn	Phe	His	Phe	Ala	Pro	Gly	Lys	Ser	Phe	Gln	Gln
	210					215					220				
Ser	His	Val	His	Val	His	Asp	Leu	Gln	Ser	Phe	Gly	Leu	Asp	Asn	Ile
225					230					235					240
Asn	Met	Thr	His	Tyr	Ile	Gln	His	Leu	Ser	Phe	Gly	Glu	Asp	Tyr	Pro
			245						250					255	
Gly	Ile	Val	Asn	Pro	Leu	Asp	His	Thr	Asn	Val	Thr	Ala	Pro	Gln	Ala
			260					265					270		
Ser	Met	Met	Phe	Gln	Tyr	Phe	Val	Lys	Val	Val	Pro	Thr	Val	Tyr	Met
		275					280					285			
Lys	Val	Asp	Gly	Glu	Val	Leu	Arg	Thr	Asn	Gln	Phe	Ser	Val	Thr	Arg
	290					295					300				
His	Glu	Lys	Val	Ala	Asn	Gly	Leu	Leu	Gly	Asp	Gln	Gly	Leu	Pro	Gly
305					310					315					320
Val	Phe	Val	Leu	Tyr	Glu	Leu	Ser	Pro	Met	Met	Val	Lys	Leu	Thr	Glu
				325					330					335	
Lys	His	Arg	Ser	Phe	Thr	His	Phe	Leu	Thr	Gly	Val	Cys	Ala	Ile	Ile
			340					345					350		
Gly	Gly	Met	Phe	Thr	Val	Ala	Gly	Leu	Ile	Asp	Ser	Leu	Ile	Tyr	His
		355					360					365			
Ser	Ala	Arg	Ala	Ile	Gln	Lys	Lys	Ile	Asp	Leu	Gly	Lys	Thr	Thr	
	370					375					380				

<210> 89
 <211> 391
 <212> PRT
 <213> Homo sapiens

<400>	89														
Met	Ala	Asp	Ile	Asp	Asn	Lys	Glu	Gln	Ser	Glu	Leu	Asp	Gln	Asp	Leu
1				5					10					15	
Asp	Asp	Val	Glu	Glu	Val	Glu	Glu	Glu	Glu	Thr	Gly	Glu	Glu	Thr	Lys
			20					25					30		
Leu	Lys	Ala	Arg	Gln	Leu	Thr	Val	Gln	Met	Met	Gln	Asn	Pro	Gln	Ile
		35					40					45			
Leu	Ala	Ala	Leu	Gln	Glu	Arg	Leu	Asp	Gly	Leu	Val	Glu	Thr	Pro	Thr
	50					55				60					
Gly	Tyr	Ile	Glu	Ser	Leu	Pro	Arg	Val	Val	Lys	Arg	Arg	Val	Asn	Ala
65					70					75				80	
Leu	Lys	Asn	Leu	Gln	Val	Lys	Cys	Ala	Gln	Ile	Glu	Ala	Lys	Phe	Tyr
			85						90					95	
Glu	Glu	Val	His	Asp	Leu	Glu	Arg	Lys	Tyr	Ala	Val	Leu	Tyr	Gln	Pro
			100					105					110		
Leu	Phe	Asp	Lys	Arg	Phe	Glu	Ile	Ile	Asn	Ala	Ile	Tyr	Glu	Pro	Thr
		115					120					125			
Glu	Glu	Glu	Cys	Glu	Trp	Lys	Pro	Asp	Glu	Glu	Asp	Glu	Ile	Ser	Glu
	130					135					140				
Glu	Leu	Lys	Glu	Lys	Ala	Lys	Ile	Glu	Asp	Glu	Lys	Lys	Asp	Glu	Glu
145					150					155					160
Lys	Glu	Asp	Pro	Lys	Gly	Ile	Pro	Glu	Phe	Trp	Leu	Thr	Val	Phe	Lys
				165					170					175	
Asn	Val	Asp	Leu	Leu	Ser	Asp	Met	Val	Gln	Glu	His	Asp	Glu	Pro	Ile

Sequence listing.txt

Leu	Lys	His	180	Leu	Lys	Asp	Ile	Lys	185	Val	Lys	Phe	Ser	Asp	190	Ala	Gly	Gln
		195							200					205				
Pro	Met	Ser	Phe	Val	Leu	Glu	Phe	His	Phe	Glu	Pro	Asn	Glu	Tyr	Phe			
	210					215					220							
Thr	Asn	Glu	Val	Leu	Thr	Lys	Thr	Tyr	Arg	Met	Arg	Ser	Glu	Pro	Asp			
	225				230					235					240			
Asp	Ser	Asp	Pro	Phe	Ser	Phe	Asp	Gly	Pro	Glu	Ile	Met	Gly	Cys	Thr			
			245						250					255				
Gly	Cys	Gln	Ile	Asp	Trp	Lys	Lys	Gly	Lys	Asn	Val	Thr	Leu	Lys	Thr			
		260						265					270					
Ile	Lys	Lys	Lys	Gln	Lys	His	Lys	Gly	Arg	Gly	Thr	Val	Arg	Thr	Val			
	275						280					285						
Thr	Lys	Thr	Val	Ser	Asn	Asp	Ser	Phe	Phe	Asn	Phe	Phe	Ala	Pro	Pro			
	290					295					300							
Glu	Val	Pro	Glu	Ser	Gly	Asp	Leu	Asp	Asp	Asp	Ala	Glu	Ala	Ile	Leu			
	305				310					315					320			
Ala	Ala	Asp	Phe	Glu	Ile	Gly	His	Phe	Leu	Arg	Glu	Arg	Ile	Ile	Pro			
			325					330					335					
Arg	Ser	Val	Leu	Tyr	Phe	Thr	Gly	Glu	Ala	Ile	Glu	Asp	Asp	Asp	Asp			
		340						345					350					
Asp	Tyr	Asp	Glu	Glu	Gly	Glu	Glu	Ala	Asp	Glu	Glu	Gly	Glu	Glu	Glu			
	355					360						365						
Gly	Asp	Glu	Glu	Asn	Asp	Pro	Asp	Tyr	Asp	Pro	Lys	Lys	Asp	Gln	Asn			
	370				375					380								
Pro	Ala	Glu	Cys	Lys	Gln	Gln												
	385				390													

<210> 90
 <211> 836
 <212> PRT
 <213> Homo sapiens

<400> 90

Met	Ile	Pro	Phe	Leu	Pro	Met	Phe	Ser	Leu	Leu	Leu	Leu	Leu	Ile	Val
1				5				10						15	
Asn	Pro	Ile	Asn	Ala	Asn	Asn	His	Tyr	Asp	Lys	Ile	Leu	Ala	His	Ser
		20						25				30			
Arg	Ile	Arg	Gly	Arg	Asp	Gln	Gly	Pro	Asn	Val	Cys	Ala	Leu	Gln	Gln
		35					40				45				
Ile	Leu	Gly	Thr	Lys	Lys	Lys	Tyr	Phe	Ser	Thr	Cys	Lys	Asn	Trp	Tyr
	50					55					60				
Lys	Lys	Ser	Ile	Cys	Gly	Gln	Lys	Thr	Thr	Val	Leu	Tyr	Glu	Cys	Cys
	65			70					75					80	
Pro	Gly	Tyr	Met	Arg	Met	Glu	Gly	Met	Lys	Gly	Cys	Pro	Ala	Val	Leu
			85					90					95		
Pro	Ile	Asp	His	Val	Tyr	Gly	Thr	Leu	Gly	Ile	Val	Gly	Ala	Thr	Thr
		100						105					110		
Thr	Gln	Arg	Tyr	Ser	Asp	Ala	Ser	Lys	Leu	Arg	Glu	Glu	Ile	Glu	Gly
	115						120					125			
Lys	Gly	Ser	Phe	Thr	Tyr	Phe	Ala	Pro	Ser	Asn	Glu	Ala	Trp	Asp	Asn
	130					135					140				
Leu	Asp	Ser	Asp	Ile	Arg	Arg	Gly	Leu	Glu	Ser	Asn	Val	Asn	Val	Glu
	145				150					155					160
Leu	Leu	Asn	Ala	Leu	His	Ser	His	Met	Ile	Asn	Lys	Arg	Met	Leu	Thr
			165					170					175		
Lys	Asp	Leu	Lys	Asn	Gly	Met	Ile	Ile	Pro	Ser	Met	Tyr	Asn	Asn	Leu
		180					185						190		
Gly	Leu	Phe	Ile	Asn	His	Tyr	Pro	Asn	Gly	Val	Val	Thr	Val	Asn	Cys
	195					200						205			
Ala	Arg	Ile	Ile	His	Gly	Asn	Gln	Ile	Ala	Thr	Asn	Gly	Val	Val	His
	210					215					220				

Sequence listing.txt

```

Val Ile Asp Arg Val Leu Thr Gln Ile Gly Thr Ser Ile Gln Asp Phe
225      230      235      240
Ile Glu Ala Glu Asp Asp Leu Ser Ser Phe Arg Ala Ala Ala Ile Thr
      245      250      255
Ser Asp Ile Leu Glu Ala Leu Gly Arg Asp Gly His Phe Thr Leu Phe
      260      265      270
Ala Pro Thr Asn Glu Ala Phe Glu Lys Leu Pro Arg Gly Val Leu Glu
      275      280      285
Arg Phe Met Gly Asp Lys Val Ala Ser Glu Ala Leu Met Lys Tyr His
      290      295      300
Ile Leu Asn Thr Leu Gln Cys Ser Glu Ser Ile Met Gly Gly Ala Val
305      310      315      320
Phe Glu Thr Leu Glu Gly Asn Thr Ile Glu Ile Gly Cys Asp Gly Asp
      325      330      335
Ser Ile Thr Val Asn Gly Ile Lys Met Val Asn Lys Lys Asp Ile Val
      340      345      350
Thr Asn Asn Gly Val Ile His Leu Ile Asp Gln Val Leu Ile Pro Asp
      355      360      365
Ser Ala Lys Gln Val Ile Glu Leu Ala Gly Lys Gln Gln Thr Thr Phe
      370      375      380
Thr Asp Leu Val Ala Gln Leu Gly Leu Ala Ser Ala Leu Arg Pro Asp
385      390      395      400
Gly Glu Tyr Thr Leu Leu Ala Pro Val Asn Asn Ala Phe Ser Asp Asp
      405      410      415
Thr Leu Ser Met Val Gln Arg Leu Leu Lys Leu Ile Leu Gln Asn His
      420      425      430
Ile Leu Lys Val Lys Val Gly Leu Asn Glu Leu Tyr Asn Gly Gln Ile
      435      440      445
Leu Glu Thr Ile Gly Gly Lys Gln Leu Arg Val Phe Val Tyr Arg Thr
      450      455      460
Ala Val Cys Ile Glu Asn Ser Cys Met Glu Lys Gly Ser Lys Gln Gly
465      470      475      480
Arg Asn Gly Ala Ile His Ile Phe Arg Glu Ile Ile Lys Pro Ala Glu
      485      490      495
Lys Ser Leu His Glu Lys Leu Lys Gln Asp Lys Arg Phe Ser Thr Phe
      500      505      510
Leu Ser Leu Leu Glu Ala Ala Asp Leu Lys Glu Leu Leu Thr Gln Pro
      515      520      525
Gly Asp Trp Thr Leu Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met
      530      535      540
Thr Ser Glu Glu Lys Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln
545      550      555      560
Asn Ile Ile Leu Tyr His Leu Thr Pro Gly Val Phe Ile Gly Lys Gly
      565      570      575
Phe Glu Pro Gly Val Thr Asn Ile Leu Lys Thr Thr Gln Gly Ser Lys
      580      585      590
Ile Phe Leu Lys Glu Val Asn Asp Thr Leu Leu Val Asn Glu Leu Lys
      595      600      605
Ser Lys Glu Ser Asp Ile Met Thr Thr Asn Gly Val Ile His Val Val
      610      615      620
Asp Lys Leu Leu Tyr Pro Ala Asp Thr Pro Val Gly Asn Asp Gln Leu
625      630      635      640
Leu Glu Ile Leu Asn Lys Leu Ile Lys Tyr Ile Gln Ile Lys Phe Val
      645      650      655
Arg Gly Ser Thr Phe Lys Glu Ile Pro Val Thr Val Tyr Thr Thr Lys
      660      665      670
Ile Ile Thr Lys Val Val Glu Pro Lys Ile Lys Val Ile Glu Gly Ser
      675      680      685
Leu Gln Pro Ile Ile Lys Thr Glu Gly Pro Thr Leu Thr Lys Val Lys
690      695      700
Ile Glu Gly Glu Pro Glu Phe Arg Leu Ile Lys Glu Gly Glu Thr Ile
705      710      715      720
Thr Glu Val Ile His Gly Glu Pro Ile Ile Lys Lys Tyr Thr Lys Ile

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Sequence listing.txt

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      725      730      735
Ile Asp Gly Val Pro Val Glu Ile Thr Glu Lys Glu Thr Arg Glu Glu
      740      745      750
Arg Ile Ile Thr Gly Pro Glu Ile Lys Tyr Thr Arg Ile Ser Thr Gly
      755      760      765
Gly Gly Glu Thr Glu Glu Thr Leu Lys Lys Leu Leu Gln Glu Glu Val
      770      775      780
Thr Lys Val Thr Lys Phe Ile Glu Gly Gly Asp Gly His Leu Phe Glu
      785      790      795      800
Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val Arg Lys
      805      810      815
Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Arg Leu Arg Glu
      820      825      830
Gly Arg Ser Gln
      835

```

<210> 91
 <211> 3176
 <212> PRT
 <213> Homo sapiens

```

<400> 91
Met Arg Lys His Arg His Leu Pro Leu Val Ala Val Phe Cys Leu Phe
  1      5      10      15
Leu Ser Gly Phe Pro Thr Thr His Ala Gln Gln Gln Gln Ala Asp Val
      20      25      30
Lys Asn Gly Ala Ala Ala Asp Ile Phe Leu Val Asp Ser Ser Trp
      35      40      45
Thr Ile Gly Glu Glu His Phe Gln Leu Val Arg Glu Phe Leu Tyr Asp
      50      55      60
Val Val Lys Ser Leu Ala Val Gly Glu Asn Asp Phe His Phe Ala Leu
      65      70      75      80
Val Gln Phe Asn Gly Asn Pro His Thr Glu Phe Leu Leu Asn Thr Tyr
      85      90      95
Arg Thr Lys Gln Glu Val Leu Ser His Ile Ser Asn Met Ser Tyr Ile
      100      105      110
Gly Gly Thr Asn Gln Thr Gly Lys Gly Leu Glu Tyr Ile Met Gln Ser
      115      120      125
His Leu Thr Lys Ala Ala Gly Ser Arg Ala Gly Asp Gly Val Pro Gln
      130      135      140
Val Ile Val Val Leu Thr Asp Gly His Ser Lys Asp Gly Leu Ala Leu
      145      150      155      160
Pro Ser Ala Glu Leu Lys Ser Ala Asp Val Asn Val Phe Ala Ile Gly
      165      170      175
Val Glu Asp Ala Asp Glu Gly Ala Leu Lys Glu Ile Ala Ser Glu Pro
      180      185      190
Leu Asn Met His Met Phe Asn Leu Glu Asn Phe Thr Ser Leu His Asp
      195      200      205
Ile Val Gly Asn Leu Val Ser Cys Val His Ser Ser Val Ser Pro Glu
      210      215      220
Arg Ala Gly Asp Thr Glu Thr Leu Lys Asp Ile Thr Ala Gln Asp Ser
      225      230      235      240
Ala Asp Ile Ile Phe Leu Ile Asp Gly Ser Asn Asn Thr Gly Ser Val
      245      250      255
Asn Phe Ala Val Ile Leu Asp Phe Leu Val Asn Leu Leu Glu Lys Leu
      260      265      270
Pro Ile Gly Thr Gln Gln Ile Arg Val Gly Val Val Gln Phe Ser Asp
      275      280      285
Glu Pro Arg Thr Met Phe Ser Leu Asp Thr Tyr Ser Thr Lys Ala Gln
      290      295      300
Val Leu Gly Ala Val Lys Ala Leu Gly Phe Ala Gly Gly Glu Leu Ala
      305      310      315      320

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Sequence listing.txt

Asn Ile Gly Leu Ala Leu Asp Phe Val Val Glu Asn His Phe Thr Arg
 325 330 335
 Ala Gly Gly Ser Arg Val Glu Glu Gly Val Pro Gln Val Leu Val Leu
 340 345 350
 Ile Ser Ala Gly Pro Ser Ser Asp Glu Ile Arg Tyr Gly Val Val Ala
 355 360 365
 Leu Lys Gln Ala Ser Val Phe Ser Phe Gly Leu Gly Ala Gln Ala Ala
 370 375 380
 Ser Arg Ala Glu Leu Gln His Ile Ala Thr Asp Asp Asn Leu Val Phe
 385 390 395 400
 Thr Val Pro Glu Phe Arg Ser Phe Gly Asp Leu Gln Glu Lys Leu Leu
 405 410 415
 Pro Tyr Ile Val Gly Val Ala Gln Arg His Ile Val Leu Lys Pro Pro
 420 425 430
 Thr Ile Val Thr Gln Val Ile Glu Val Asn Lys Arg Asp Ile Val Phe
 435 440 445
 Leu Val Asp Gly Ser Ser Ala Leu Gly Leu Ala Asn Phe Asn Ala Ile
 450 455 460
 Arg Asp Phe Ile Ala Lys Val Ile Gln Arg Leu Glu Ile Gly Gln Asp
 465 470 475 480
 Leu Ile Gln Val Ala Val Ala Gln Tyr Ala Asp Thr Val Arg Pro Glu
 485 490 495
 Phe Tyr Phe Asn Thr His Pro Thr Lys Arg Glu Val Ile Thr Ala Val
 500 505 510
 Arg Lys Met Lys Pro Leu Asp Gly Ser Ala Leu Tyr Thr Gly Ser Ala
 515 520 525
 Leu Asp Phe Val Arg Asn Asn Leu Phe Thr Ser Ser Ala Gly Tyr Arg
 530 535 540
 Ala Ala Glu Gly Ile Pro Lys Leu Leu Val Leu Ile Thr Gly Gly Lys
 545 550 555 560
 Ser Leu Asp Glu Ile Ser Gln Pro Ala Gln Glu Leu Lys Arg Ser Ser
 565 570 575
 Ile Met Ala Phe Ala Ile Gly Asn Lys Gly Ala Asp Gln Ala Glu Leu
 580 585 590
 Glu Glu Ile Ala Phe Asp Ser Ser Leu Val Phe Ile Pro Ala Glu Phe
 595 600 605
 Arg Ala Ala Pro Leu Gln Gly Met Leu Pro Gly Leu Leu Ala Pro Leu
 610 615 620
 Arg Thr Leu Ser Gly Thr Pro Glu Val His Ser Asn Lys Arg Asp Ile
 625 630 635 640
 Ile Phe Leu Leu Asp Gly Ser Ala Asn Val Gly Lys Thr Asn Phe Pro
 645 650 655
 Tyr Val Arg Asp Phe Val Met Asn Leu Val Asn Ser Leu Asp Ile Gly
 660 665 670
 Asn Asp Asn Ile Arg Val Gly Leu Val Gln Phe Ser Asp Thr Pro Val
 675 680 685
 Thr Glu Phe Ser Leu Asn Thr Tyr Gln Thr Lys Ser Asp Ile Leu Gly
 690 695 700
 His Leu Arg Gln Leu Gln Leu Gln Gly Gly Ser Gly Leu Asn Thr Gly
 705 710 715 720
 Ser Ala Leu Ser Tyr Val Tyr Ala Asn His Phe Thr Glu Ala Gly Gly
 725 730 735
 Ser Arg Ile Arg Glu His Val Pro Gln Leu Leu Leu Leu Thr Ala
 740 745 750
 Gly Gln Ser Glu Asp Ser Tyr Leu Gln Ala Ala Asn Ala Leu Thr Arg
 755 760 765
 Ala Gly Ile Leu Thr Phe Cys Val Gly Ala Ser Gln Ala Asn Lys Ala
 770 775 780
 Glu Leu Glu Gln Ile Ala Phe Asn Pro Ser Leu Val Tyr Leu Met Asp
 785 790 795 800
 Asp Phe Ser Ser Leu Pro Ala Leu Pro Gln Gln Leu Ile Gln Pro Leu
 805 810 815
 Thr Thr Tyr Val Ser Gly Gly Val Glu Glu Val Pro Leu Ala Gln Pro

825 830

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Sequence listing.txt

Gly Ser Arg Ile Glu Glu Gly Val Pro Gln Phe Leu Val Leu Ile Ser
 1330 1335 1340
 Ser Gly Lys Ser Asp Asp Glu Val Val Val Pro Ala Val Glu Leu Lys
 1345 1350 1355 1360
 Gln Phe Gly Val Ala Pro Phe Thr Ile Ala Arg Asn Ala Asp Gln Glu
 1365 1370 1375
 Glu Leu Val Lys Ile Ser Leu Ser Pro Glu Tyr Val Phe Ser Val Ser
 1380 1385 1390
 Thr Phe Arg Glu Leu Pro Ser Leu Glu Gln Lys Leu Leu Thr Pro Ile
 1395 1400 1405
 Thr Thr Leu Thr Ser Glu Gln Ile Gln Lys Leu Leu Ala Ser Thr Arg
 1410 1415 1420
 Tyr Pro Pro Pro Ala Val Glu Ser Asp Ala Ala Asp Ile Val Phe Leu
 1425 1430 1435 1440
 Ile Asp Ser Ser Glu Gly Val Arg Pro Asp Gly Phe Ala His Ile Arg
 1445 1450 1455
 Asp Phe Val Ser Arg Ile Val Arg Arg Leu Asn Ile Gly Pro Ser Lys
 1460 1465 1470
 Val Arg Val Gly Val Val Gln Phe Ser Asn Asp Val Phe Pro Glu Phe
 1475 1480 1485
 Tyr Leu Lys Thr Tyr Arg Ser Gln Ala Pro Val Leu Asp Ala Ile Arg
 1490 1495 1500
 Arg Leu Arg Leu Arg Gly Gly Ser Pro Leu Asn Thr Gly Lys Ala Leu
 1505 1510 1515 1520
 Glu Phe Val Ala Arg Asn Leu Phe Val Lys Ser Ala Gly Ser Arg Ile
 1525 1530 1535
 Glu Asp Gly Val Pro Gln His Leu Val Leu Val Leu Gly Gly Lys Ser
 1540 1545 1550
 Gln Asp Asp Val Ser Arg Phe Ala Gln Val Ile Arg Ser Ser Gly Ile
 1555 1560 1565
 Val Ser Leu Gly Val Gly Asp Arg Asn Ile Asp Arg Thr Glu Leu Gln
 1570 1575 1580
 Thr Ile Thr Asn Asp Pro Arg Leu Val Phe Thr Val Arg Glu Phe Arg
 1585 1590 1595 1600
 Glu Leu Pro Asn Ile Glu Glu Arg Ile Met Asn Ser Phe Gly Pro Ser
 1605 1610 1615
 Ala Ala Thr Pro Ala Pro Pro Gly Val Asp Thr Pro Pro Pro Ser Arg
 1620 1625 1630
 Pro Glu Lys Lys Lys Ala Asp Ile Val Phe Leu Leu Asp Gly Ser Ile
 1635 1640 1645
 Asn Phe Arg Arg Asp Ser Phe Gln Glu Val Leu Arg Phe Val Ser Glu
 1650 1655 1660
 Ile Val Asp Thr Val Tyr Glu Asp Gly Asp Ser Ile Gln Val Gly Leu
 1665 1670 1675 1680
 Val Gln Tyr Asn Ser Asp Pro Thr Asp Glu Phe Phe Leu Lys Asp Phe
 1685 1690 1695
 Ser Thr Lys Arg Gln Ile Ile Asp Ala Ile Asn Lys Val Val Tyr Lys
 1700 1705 1710
 Gly Gly Arg His Ala Asn Thr Lys Val Gly Leu Glu His Leu Arg Val
 1715 1720 1725
 Asn His Phe Val Pro Glu Ala Gly Ser Arg Leu Asp Gln Arg Val Pro
 1730 1735 1740
 Gln Ile Ala Phe Val Ile Thr Gly Gly Lys Ser Val Glu Asp Ala Gln
 1745 1750 1755 1760
 Asp Val Ser Leu Ala Leu Thr Gln Arg Gly Val Lys Val Phe Ala Val
 1765 1770 1775
 Gly Val Arg Asn Ile Asp Ser Glu Glu Val Gly Lys Ile Ala Ser Asn
 1780 1785 1790
 Ser Ala Thr Ala Phe Arg Val Gly Asn Val Gln Glu Leu Ser Glu Leu
 1795 1800 1805
 Ser Glu Gln Val Leu Glu Thr Leu His Asp Ala Met His Glu Thr Leu
 1810 1815 1820
 Cys Pro Gly Val Thr Asp Ala Ala Lys Ala Cys Asn Leu Asp Val Ile

Sequence listing.txt

```

1825          1830          1835          1840
Leu Gly Phe Asp Gly Ser Arg Asp Gln Asn Val Phe Val Ala Gln Lys
1845          1850          1855
Gly Phe Glu Ser Lys Val Asp Ala Ile Leu Asn Arg Ile Ser Gln Met
1860          1865          1870
His Arg Val Ser Cys Ser Gly Gly Arg Ser Pro Thr Val Arg Val Ser
1875          1880          1885
Val Val Ala Asn Thr Pro Ser Gly Pro Val Glu Ala Phe Asp Phe Asp
1890          1895          1900
Glu Tyr Gln Pro Glu Met Leu Glu Lys Phe Arg Asn Met Arg Ser Gln
1905          1910          1915
His Pro Tyr Val Leu Thr Glu Asp Thr Leu Lys Val Tyr Leu Asn Lys
1925          1930          1935
Phe Arg Gln Ser Ser Pro Asp Ser Val Lys Val Val Ile His Phe Thr
1940          1945          1950
Asp Gly Ala Asp Gly Asp Leu Ala Asp Leu His Arg Ala Ser Glu Asn
1955          1960          1965
Leu Arg Gln Glu Gly Val Arg Ala Leu Ile Leu Val Gly Leu Glu Arg
1970          1975          1980
Val Val Asn Leu Glu Arg Leu Met His Leu Glu Phe Gly Arg Gly Phe
1985          1990          1995
Met Tyr Asp Arg Pro Leu Arg Leu Asn Leu Leu Asp Leu Asp Tyr Glu
2000          2005          2010
Leu Ala Glu Gln Leu Asp Asn Ile Ala Glu Lys Ala Cys Cys Gly Val
2020          2025          2030
Pro Cys Lys Cys Ser Gly Gln Arg Gly Asp Arg Gly Pro Ile Gly Ser
2035          2040          2045
Ile Gly Pro Lys Gly Ile Pro Gly Glu Asp Gly Tyr Arg Gly Tyr Pro
2050          2055          2060
Gly Asp Glu Gly Gly Pro Gly Glu Arg Gly Pro Pro Gly Val Asn Gly
2065          2070          2075
Thr Gln Gly Phe Gln Gly Cys Pro Gly Gln Arg Gly Val Lys Gly Ser
2085          2090          2095
Arg Gly Phe Pro Gly Glu Lys Gly Glu Val Gly Glu Ile Gly Leu Asp
2100          2105          2110
Gly Leu Asp Gly Glu Asp Gly Asp Lys Gly Leu Pro Gly Ser Ser Gly
2115          2120          2125
Glu Lys Gly Asn Pro Gly Arg Arg Gly Asp Lys Gly Pro Arg Gly Glu
2130          2135          2140
Lys Gly Glu Arg Gly Asp Val Gly Ile Arg Gly Asp Pro Gly Asn Pro
2145          2150          2155
Gly Gln Asp Ser Gln Glu Arg Gly Pro Lys Gly Glu Thr Gly Asp Leu
2165          2170          2175
Gly Pro Met Gly Val Pro Gly Arg Asp Gly Val Pro Gly Gly Pro Gly
2180          2185          2190
Glu Thr Gly Lys Asn Gly Gly Phe Gly Arg Arg Gly Pro Pro Gly Ala
2195          2200          2205
Lys Gly Asn Lys Gly Gly Pro Gly Gln Pro Gly Phe Glu Gly Glu Gln
2210          2215          2220
Gly Thr Arg Gly Ala Gln Gly Pro Ala Gly Pro Ala Gly Pro Pro Gly
2225          2230          2235
Leu Ile Gly Glu Gln Gly Ile Ser Gly Pro Arg Gly Ser Gly Gly Ala
2245          2250          2255
Arg Gly Ala Pro Gly Glu Arg Gly Arg Thr Gly Pro Leu Gly Arg Lys
2260          2265          2270
Gly Glu Pro Gly Glu Pro Gly Pro Lys Gly Gly Ile Gly Asn Pro Gly
2275          2280          2285
Pro Arg Gly Glu Thr Gly Asp Asp Gly Arg Asp Gly Val Gly Ser Glu
2290          2295          2300
Gly Arg Arg Gly Lys Lys Gly Glu Arg Gly Phe Pro Gly Tyr Pro Gly
2305          2310          2315
Pro Lys Gly Asn Pro Gly Glu Pro Gly Leu Asn Gly Thr Thr Gly Pro
2325          2330          2335

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Sequence listing.txt

Lys Gly Ile Arg Gly Arg Arg Gly Asn Ser Gly Pro Pro Gly Ile Val
 2340 2345 2350
 Gly Gln Lys Gly Arg Pro Gly Tyr Pro Gly Pro Ala Gly Pro Arg Gly
 2355 2360 2365
 Asn Arg Gly Asp Ser Ile Asp Gln Cys Ala Leu Ile Gln Ser Ile Lys
 2370 2375 2380
 Asp Lys Cys Pro Cys Cys Tyr Gly Pro Leu Glu Cys Pro Val Phe Pro
 2385 2390 2395 2400
 Thr Glu Leu Ala Phe Ala Leu Asp Thr Ser Glu Gly Val Asn Gln Asp
 2405 2410 2415
 Thr Phe Gly Arg Met Arg Asp Val Val Leu Ser Ile Val Asn Val Leu
 2420 2425 2430
 Thr Ile Ala Glu Ser Asn Cys Pro Thr Gly Ala Arg Val Ala Val Val
 2435 2440 2445
 Thr Tyr Asn Asn Glu Val Thr Thr Glu Ile Arg Phe Ala Asp Ser Lys
 2450 2455 2460
 Arg Lys Ser Val Leu Leu Asp Lys Ile Lys Asn Leu Gln Val Ala Leu
 2465 2470 2475 2480
 Thr Ser Lys Gln Gln Ser Leu Glu Thr Ala Met Ser Phe Val Ala Arg
 2485 2490 2495
 Asn Thr Phe Lys Arg Val Arg Asn Gly Phe Leu Met Arg Lys Val Ala
 2500 2505 2510
 Val Phe Phe Ser Asn Thr Pro Thr Arg Ala Ser Pro Gln Leu Arg Glu
 2515 2520 2525
 Ala Val Leu Lys Leu Ser Asp Ala Gly Ile Thr Pro Leu Phe Leu Thr
 2530 2535 2540
 Arg Gln Glu Asp Arg Gln Leu Ile Asn Ala Leu Gln Ile Asn Asn Thr
 2545 2550 2555 2560
 Ala Val Gly His Ala Leu Val Leu Pro Ala Gly Arg Asp Leu Thr Asp
 2565 2570 2575
 Phe Leu Glu Asn Val Leu Thr Cys His Val Cys Leu Asp Ile Cys Asn
 2580 2585 2590
 Ile Asp Pro Ser Cys Gly Phe Gly Ser Trp Arg Pro Ser Phe Arg Asp
 2595 2600 2605
 Arg Arg Ala Ala Gly Ser Asp Val Asp Ile Asp Met Ala Phe Ile Leu
 2610 2615 2620
 Asp Ser Ala Glu Thr Thr Thr Leu Phe Gln Phe Asn Glu Met Lys Lys
 2625 2630 2635 2640
 Tyr Ile Ala Tyr Leu Val Arg Gln Leu Asp Met Ser Pro Asp Pro Lys
 2645 2650 2655
 Ala Ser Gln His Phe Ala Arg Val Ala Val Val Gln His Ala Pro Ser
 2660 2665 2670
 Glu Ser Val Asp Asn Ala Ser Met Pro Pro Val Lys Val Glu Phe Ser
 2675 2680 2685
 Leu Thr Asp Tyr Gly Ser Lys Glu Lys Leu Val Asp Phe Leu Ser Arg
 2690 2695 2700
 Gly Met Thr Gln Leu Gln Gly Thr Arg Ala Leu Gly Ser Ala Ile Glu
 2705 2710 2715 2720
 Tyr Thr Ile Glu Asn Val Phe Glu Ser Ala Pro Asn Pro Arg Asp Leu
 2725 2730 2735
 Lys Ile Val Val Leu Met Leu Thr Gly Glu Val Pro Glu Gln Gln Leu
 2740 2745 2750
 Glu Glu Ala Gln Arg Val Ile Leu Gln Ala Lys Cys Lys Gly Tyr Phe
 2755 2760 2765
 Phe Val Val Leu Gly Ile Gly Arg Lys Val Asn Ile Lys Glu Val Tyr
 2770 2775 2780
 Thr Phe Ala Ser Glu Pro Asn Asp Val Phe Phe Lys Leu Val Asp Lys
 2785 2790 2795 2800
 Ser Thr Glu Leu Asn Glu Glu Pro Leu Met Arg Phe Gly Arg Leu Leu
 2805 2810 2815
 Pro Ser Phe Val Ser Ser Glu Asn Ala Phe Tyr Leu Ser Pro Asp Ile
 2820 2825 2830
 Arg Lys Gln Cys Asp Trp Phe Gln Gly Asp Gln Pro Thr Lys Asn Leu

Sequence listing.txt

```

2835          2840          2845
Val Lys Phe Gly His Lys Gln Val Asn Val Pro Asn Asn Val Thr Ser
2850          2855          2860
Ser Pro Thr Ser Asn Pro Val Thr Thr Thr Lys Pro Val Thr Thr Thr
2865          2870          2875          2880
Lys Pro Val Thr Thr Thr Lys Pro Val Thr Thr Thr Thr Lys Pro
2885          2890          2895
Val Thr Ile Ile Asn Gln Pro Ser Val Lys Pro Ala Ala Ala Lys Pro
2900          2905          2910
Ala Pro Ala Lys Pro Val Ala Ala Lys Pro Val Ala Thr Lys Thr Ala
2915          2920          2925
Thr Val Arg Pro Pro Val Ala Val Lys Pro Ala Thr Ala Ala Lys Pro
2930          2935          2940
Val Ala Ala Lys Pro Ala Ala Val Arg Pro Pro Ala Ala Ala Ala Lys
2945          2950          2955          2960
Pro Val Ala Thr Lys Pro Glu Val Pro Arg Pro Gln Ala Ala Lys Pro
2965          2970          2975
Ala Ala Thr Lys Pro Ala Thr Thr Lys Pro Val Val Lys Met Leu Arg
2980          2985          2990
Glu Val Gln Val Phe Glu Ile Thr Glu Asn Ser Ala Lys Leu His Trp
2995          3000          3005
Glu Arg Pro Glu Pro Pro Gly Pro Tyr Phe Tyr Asp Leu Thr Val Thr
3010          3015          3020
Ser Ala His Asp Gln Ser Leu Val Leu Lys Gln Asn Leu Thr Val Thr
3025          3030          3035          3040
Asp Arg Val Ile Gly Gly Leu Leu Ala Gly Gln Thr Tyr His Val Ala
3045          3050          3055
Val Val Cys Tyr Leu Arg Ser Gln Val Arg Ala Thr Tyr His Gly Ser
3060          3065          3070
Phe Ser Thr Lys Lys Ser Gln Pro Pro Pro Gln Pro Ala Arg Ser
3075          3080          3085
Ala Ser Ser Ser Thr Ile Asn Leu Met Val Ser Thr Glu Pro Leu Ala
3090          3095          3100
Leu Thr Glu Thr Asp Ile Cys Lys Leu Pro Lys Asp Glu Gly Thr Cys
3105          3110          3115          3120
Arg Asp Phe Ile Leu Lys Trp Tyr Tyr Asp Pro Asn Thr Lys Ser Cys
3125          3130          3135
Ala Arg Phe Trp Tyr Gly Gly Cys Gly Gly Asn Glu Asn Lys Phe Gly
3140          3145          3150
Ser Gln Lys Glu Cys Glu Lys Val Cys Ala Pro Val Leu Ala Lys Pro
3155          3160          3165
Gly Val Ile Ser Val Met Gly Thr
3170          3175

```

<210> 92
 <211> 303
 <212> PRT
 <213> Homo sapiens

```

<400> 92
Met Arg Ala Trp Ile Phe Phe Leu Leu Cys Leu Ala Gly Arg Ala Leu
1      5      10      15
Ala Ala Pro Gln Gln Glu Ala Leu Pro Asp Glu Thr Glu Val Val Glu
20     25     30
Glu Thr Val Ala Glu Val Thr Glu Val Ser Val Gly Ala Asn Pro Val
35     40     45
Gln Val Glu Val Gly Glu Phe Asp Asp Gly Ala Glu Thr Glu Glu
50     55     60
Glu Val Val Ala Glu Asn Pro Cys Gln Asn His His Cys Lys His Gly
65     70     75     80
Lys Val Cys Glu Leu Asp Glu Asn Asn Thr Pro Met Cys Val Cys Gln
85     90     95

```

Sequence listing.txt

```

Asp Pro Thr Ser Cys Pro Ala Pro Ile Gly Glu Phe Glu Lys Val Cys
      100      105      110
Ser Asn Asp Asn Lys Thr Phe Asp Ser Ser Cys His Phe Phe Ala Thr
      115      120      125
Lys Cys Thr Leu Glu Gly Thr Lys Lys Gly His Lys Leu His Leu Asp
      130      135      140
Tyr Ile Gly Pro Cys Lys Tyr Ile Pro Pro Cys Leu Asp Ser Glu Leu
      145      150      155      160
Thr Glu Phe Pro Leu Arg Met Arg Asp Trp Leu Lys Asn Val Leu Val
      165      170      175
Thr Leu Tyr Glu Arg Asp Glu Asp Asn Asn Leu Leu Thr Glu Lys Gln
      180      185      190
Lys Leu Arg Val Lys Lys Ile His Glu Asn Glu Lys Arg Leu Glu Ala
      195      200      205
Gly Asp His Pro Val Glu Leu Leu Ala Arg Asp Phe Glu Lys Asn Tyr
      210      215      220
Asn Met Tyr Ile Phe Pro Val His Trp Gln Phe Gly Gln Leu Asp Gln
      225      230      235      240
His Pro Ile Asp Gly Tyr Leu Ser His Thr Glu Leu Ala Pro Leu Arg
      245      250      255
Ala Pro Leu Ile Pro Met Glu His Cys Thr Thr Arg Phe Phe Glu Thr
      260      265      270
Cys Asp Leu Asp Asn Asp Lys Tyr Ile Ala Leu Asp Glu Trp Ala Gly
      275      280      285
Cys Phe Gly Ile Lys Gln Lys Asp Ile Asp Lys Asp Leu Val Ile
      290      295      300

```

<210> 93

<211> 683

<212> PRT

<213> Homo sapiens

<400> 93

```

Met Ala Leu Phe Val Arg Leu Leu Ala Leu Ala Leu Ala Leu Ala Leu
  1      5      10      15
Gly Pro Ala Ala Thr Leu Ala Gly Pro Ala Lys Ser Pro Tyr Gln Leu
      20      25      30
Val Leu Gln His Ser Arg Leu Arg Gly Arg Gln His Gly Pro Asn Val
      35      40      45
Cys Ala Val Gln Lys Val Ile Gly Thr Asn Arg Lys Tyr Phe Thr Asn
      50      55      60
Cys Lys Gln Trp Tyr Gln Arg Lys Ile Cys Gly Lys Ser Thr Val Ile
      65      70      75      80
Ser Tyr Glu Cys Cys Pro Gly Tyr Glu Lys Val Pro Gly Glu Lys Gly
      85      90      95
Cys Pro Ala Ala Leu Pro Leu Ser Asn Leu Tyr Glu Thr Leu Gly Val
      100      105      110
Val Gly Ser Thr Thr Thr Gln Leu Tyr Thr Asp Arg Thr Glu Lys Leu
      115      120      125
Arg Pro Glu Met Glu Gly Pro Gly Ser Phe Thr Ile Phe Ala Pro Ser
      130      135      140
Asn Glu Ala Trp Ala Ser Leu Pro Ala Glu Val Leu Asp Ser Leu Val
      145      150      155      160
Ser Asn Val Asn Ile Glu Leu Leu Asn Ala Leu Arg Tyr His Met Val
      165      170      175
Gly Arg Arg Val Leu Thr Asp Glu Leu Lys His Gly Met Thr Leu Thr
      180      185      190
Ser Met Tyr Gln Asn Ser Asn Ile Gln Ile His His Tyr Pro Asn Gly
      195      200      205
Ile Val Thr Val Asn Cys Ala Arg Leu Leu Lys Ala Asp His His Ala
      210      215      220
Thr Asn Gly Val Val His Leu Ile Asp Lys Val Ile Ser Thr Ile Thr

```

Sequence listing.txt

```

225          230          235          240
Asn Asn Ile Gln Gln Ile Ile Glu Ile Glu Asp Thr Phe Glu Thr Leu
Arg Ala Ala Val 245 Ala Ala Ser Gly Leu 250 Asn Thr Met Leu Glu 255 Gly Asn
Gly Gln Tyr 260 Thr Leu Leu Ala Pro 265 Thr Asn Glu Ala Phe 270 Glu Lys Ile
Pro Ser Glu Thr Leu Asn Arg 280 Ile Leu Gly Asp Pro Glu Ala Leu Arg
Asp 290 Leu Leu Asn Asn His 295 Ile Leu Lys Ser Ala Met Cys Ala Glu Ala
305 Ile Val Ala Gly Leu 310 Ser Val Glu Thr Leu 315 Glu Gly Thr Thr Leu 320 Glu
Val Gly Cys Ser 325 Gly Asp Met Leu Thr 330 Ile Asn Gly Lys Ala 335 Ile Ile
Ser Asn Lys 340 Asp Ile Leu Ala Thr 345 Asn Gly Val Ile His 350 Tyr Ile Asp
Glu Leu 355 Ile Pro Asp Ser 360 Ala Lys Thr Leu Phe 365 Glu Leu Ala Ala
370 Glu Ser Asp Val Ser Thr Ala Ile Asp Leu Phe Arg Gln Ala Gly Leu
385 Gly Asn His Leu Ser 390 Gly Ser Glu Arg Leu Thr Leu Leu Ala Pro 400 Leu
Asn Ser Val Phe 405 Lys Asp Gly Thr Pro 410 Ile Asp Ala His 415 Thr Arg
Asn Leu Leu Arg Asn His Ile Ile Lys Asp Gln Leu Ala Ser Lys Tyr
435 Leu Tyr His Gly Gln Thr Leu 440 Glu Thr Leu Gly Gly Lys Lys Leu Arg
450 Val Phe Val Tyr Arg Asn Ser 455 Leu Cys Ile Glu Asn Ser Cys Ile Ala
465 Ala His Asp Lys Arg 470 Gly Arg Tyr Gly Thr Leu Phe Thr Met Asp Arg
485 Val Leu Thr Pro Pro Met Gly Thr Val 490 Met Asp Val Leu Lys 495 Gly Asp
Asn Arg Phe Ser Met Leu Val Ala 500 Ala Ile Gln Ser Ala 510 Gly Leu Thr
515 Glu Thr Leu Asn Arg Glu Gly Val Tyr Thr Val Phe Ala Pro Thr Asn
530 Glu Ala Phe Arg Ala Leu 535 Pro Pro Arg Glu Arg Ser Arg Leu Leu Gly
545 Asp Ala Lys Glu Leu Ala Asn Ile Leu Lys Tyr His Ile Gly Asp Glu
565 Ile Leu Val Ser Gly Gly Ile Gly Ala Leu Val Arg Leu Lys 575 Ser Leu
580 Gln Gly Asp Lys Leu Glu Val Ser 585 Leu Lys Asn Asn Val 590 Val Ser Val
595 Asn Lys Glu Pro Val Ala Glu Pro Asp Ile Met Ala Thr Asn Gly Val
610 Val His Val Ile Thr Asn Val 615 Leu Gln Pro Pro Ala Asn Arg Pro Gln
625 Glu Arg Gly Asp Glu Leu Ala Asp Ser Ala Leu Glu Ile Phe Lys 640 Gln
645 Ala Ser Ala Phe Ser Arg Ala Ser Gln Arg Ser Val Arg Leu Ala Pro
660 Val Tyr Gln Lys Leu Leu Glu Arg 665 Met Lys His
675          680

```

<210> 94
 <211> 2355
 <212> PRT
 <213> Homo sapiens

Sequence listing.txt

<400> 94

```

Met Leu Arg Gly Pro Gly Pro Gly Leu Leu Leu Leu Ala Val Gln Cys
 1      5      10      15
Leu Gly Thr Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys Arg Gln
 20      25      30
Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val Ala Val Ser Gln Ser
 35      40      45
Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn Gln Gln
 50      55      60
Trp Glu Arg Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys Tyr Gly
 65      70      75      80
Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu Glu Thr
 85      90      95
Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp Thr Tyr
100      105      110
Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile Gly Ala
115      120      125
Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His Glu Gly
130      135      140
Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His Glu Thr
145      150      155      160
Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys Gly Glu
165      170      175
Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala Ala Gly
180      185      190
Thr Ser Tyr Val Val Gly Glu Thr Trp Glu Lys Pro Tyr Gln Gly Trp
195      200      205
Met Met Val Asp Cys Thr Cys Leu Gly Glu Gly Ser Gly Arg Ile Thr
210      215      220
Cys Thr Ser Arg Asn Arg Cys Asn Asp Gln Asp Thr Arg Thr Ser Tyr
225      230      235      240
Arg Ile Gly Asp Thr Trp Ser Lys Lys Asp Asn Arg Gly Asn Leu Leu
245      250      255
Gln Cys Ile Cys Thr Gly Asn Gly Arg Gly Glu Trp Lys Cys Glu Arg
260      265      270
His Thr Ser Val Gln Thr Thr Ser Ser Gly Ser Gly Pro Phe Thr Asp
275      280      285
Val Arg Ala Ala Val Tyr Gln Pro Gln Pro His Pro Gln Pro Pro Pro
290      295      300
Tyr Gly His Cys Val Thr Asp Ser Gly Val Val Tyr Ser Val Gly Met
305      310      315      320
Gln Trp Leu Lys Thr Gln Gly Asn Lys Gln Met Leu Cys Thr Cys Leu
325      330      335
Gly Asn Gly Val Ser Cys Gln Glu Thr Ala Val Thr Gln Thr Tyr Gly
340      345      350
Gly Asn Ser Asn Gly Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Gly
355      360      365
Arg Thr Phe Tyr Ser Cys Thr Thr Glu Gly Arg Gln Asp Gly His Leu
370      375      380
Trp Cys Ser Thr Thr Ser Asn Tyr Glu Gln Asp Gln Lys Tyr Ser Phe
385      390      395      400
Cys Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser Asn
405      410      415
Gly Ala Leu Cys His Phe Pro Phe Leu Tyr Asn Asn His Asn Tyr Thr
420      425      430
Asp Cys Thr Ser Glu Gly Arg Arg Asp Asn Met Lys Trp Cys Gly Thr
435      440      445
Thr Gln Asn Tyr Asp Ala Asp Gln Lys Phe Gly Phe Cys Pro Met Ala
450      455      460
Ala His Glu Glu Ile Cys Thr Thr Asn Glu Gly Val Met Tyr Arg Ile
465      470      475      480
Gly Asp Gln Trp Asp Lys Gln His Asp Met Gly His Met Met Arg Cys

```


Sequence listing.txt

Gln Thr Thr Lys Leu Asp Ala Pro Thr Asn Leu Gln Phe Val Asn Glu
 995 1000 1005
 Thr Asp Ser Thr Val Leu Val Arg Trp Thr Pro Pro Arg Ala Gln Ile
 1010 1015 1020
 Thr Gly Tyr Arg Leu Thr Val Gly Leu Thr Arg Arg Gly Gln Pro Arg
 1025 1030 1035 1040
 Gln Tyr Asn Val Gly Pro Ser Val Ser Lys Tyr Pro Leu Arg Asn Leu
 1045 1050 1055
 Gln Pro Ala Ser Glu Tyr Thr Val Ser Leu Val Ala Ile Lys Gly Asn
 1060 1065 1070
 Gln Glu Ser Pro Lys Ala Thr Gly Val Phe Thr Thr Leu Gln Pro Gly
 1075 1080 1085
 Ser Ser Ile Pro Pro Tyr Asn Thr Glu Val Thr Glu Thr Thr Ile Val
 1090 1095 1100
 Ile Thr Trp Thr Pro Ala Pro Arg Ile Gly Phe Lys Leu Gly Val Arg
 1105 1110 1115 1120
 Pro Ser Gln Gly Gly Glu Ala Pro Arg Glu Val Thr Ser Asp Ser Gly
 1125 1130 1135
 Ser Ile Val Val Ser Gly Leu Thr Pro Gly Val Glu Tyr Val Tyr Thr
 1140 1145 1150
 Ile Gln Val Leu Arg Asp Gly Gln Glu Arg Asp Ala Pro Ile Val Asn
 1155 1160 1165
 Lys Val Val Thr Pro Leu Ser Pro Pro Thr Asn Leu His Leu Glu Ala
 1170 1175 1180
 Asn Pro Asp Thr Gly Val Leu Thr Val Ser Trp Glu Arg Ser Thr Thr
 1185 1190 1195 1200
 Pro Asp Ile Thr Gly Tyr Arg Ile Thr Thr Thr Pro Thr Asn Gly Gln
 1205 1210 1215
 Gln Gly Asn Ser Leu Glu Glu Val Val His Ala Asp Gln Ser Ser Cys
 1220 1225 1230
 Thr Phe Asp Asn Leu Ser Pro Gly Leu Glu Tyr Asn Val Ser Val Tyr
 1235 1240 1245
 Thr Val Lys Asp Asp Lys Glu Ser Val Pro Ile Ser Asp Thr Ile Ile
 1250 1255 1260
 Pro Ala Val Pro Pro Pro Thr Asp Leu Arg Phe Thr Asn Ile Gly Pro
 1265 1270 1275 1280
 Asp Thr Met Arg Val Thr Trp Ala Pro Pro Pro Ser Ile Asp Leu Thr
 1285 1290 1295
 Asn Phe Leu Val Arg Tyr Ser Pro Val Lys Asn Glu Glu Asp Val Ala
 1300 1305 1310
 Glu Leu Ser Ile Ser Pro Ser Asp Asn Ala Val Val Leu Thr Asn Leu
 1315 1320 1325
 Leu Pro Gly Thr Glu Tyr Val Val Ser Val Ser Ser Val Tyr Glu Gln
 1330 1335 1340
 His Glu Ser Thr Pro Leu Arg Gly Arg Gln Lys Thr Gly Leu Asp Ser
 1345 1350 1355 1360
 Pro Thr Gly Ile Asp Phe Ser Asp Ile Thr Ala Asn Ser Phe Thr Val
 1365 1370 1375
 His Trp Ile Ala Pro Arg Ala Thr Ile Thr Gly Tyr Arg Ile Arg His
 1380 1385 1390
 His Pro Glu His Phe Ser Gly Arg Pro Arg Glu Asp Arg Val Pro His
 1395 1400 1405
 Ser Arg Asn Ser Ile Thr Leu Thr Asn Leu Thr Pro Gly Thr Glu Tyr
 1410 1415 1420
 Val Val Ser Ile Val Ala Leu Asn Gly Arg Glu Glu Ser Pro Leu Leu
 1425 1430 1435 1440
 Ile Gly Gln Gln Ser Thr Val Ser Asp Val Pro Arg Asp Leu Glu Val
 1445 1450 1455
 Val Ala Ala Thr Pro Thr Ser Leu Leu Ile Ser Trp Asp Ala Pro Ala
 1460 1465 1470
 Val Thr Val Arg Tyr Tyr Arg Ile Thr Tyr Gly Glu Thr Gly Gly Asn
 1475 1480 1485
 Ser Pro Val Gln Glu Phe Thr Val Pro Gly Ser Lys Ser Thr Ala Thr

Sequence listing.txt

```

1490      1495      1500
Ile Ser Gly Leu Lys Pro Gly Val Asp Tyr Thr Ile Thr Val Tyr Ala
1505      1510      1515      1520
Val Thr Gly Arg Gly Asp Ser Pro Ala Ser Ser Lys Pro Ile Ser Ile
1525      1530      1535
Asn Tyr Arg Thr Glu Ile Asp Lys Pro Ser Gln Met Gln Val Thr Asp
1540      1545      1550
Val Gln Asp Asn Ser Ile Ser Val Lys Trp Leu Pro Ser Ser Ser Pro
1555      1560      1565
Val Thr Gly Tyr Arg Val Thr Thr Thr Pro Lys Asn Gly Pro Gly Pro
1570      1575      1580
Thr Lys Thr Lys Thr Ala Gly Pro Asp Gln Thr Glu Met Thr Ile Glu
1585      1590      1595      1600
Gly Leu Gln Pro Thr Val Glu Tyr Val Val Ser Val Tyr Ala Gln Asn
1605      1610      1615
Pro Ser Gly Glu Ser Gln Pro Leu Val Gln Thr Ala Val Thr Asn Ile
1620      1625      1630
Asp Arg Pro Lys Gly Leu Ala Phe Thr Asp Val Asp Val Asp Ser Ile
1635      1640      1645
Lys Ile Ala Trp Glu Ser Pro Gln Gly Gln Val Ser Arg Tyr Arg Val
1650      1655      1660
Thr Tyr Ser Ser Pro Glu Asp Gly Ile His Glu Leu Phe Pro Ala Pro
1665      1670      1675      1680
Asp Gly Glu Glu Asp Thr Ala Glu Leu Gln Gly Leu Arg Pro Gly Ser
1685      1690      1695
Glu Tyr Thr Val Ser Val Val Ala Leu His Asp Asp Met Glu Ser Gln
1700      1705      1710
Pro Leu Ile Gly Thr Gln Ser Thr Ala Ile Pro Ala Pro Thr Asp Leu
1715      1720      1725
Lys Phe Thr Gln Val Thr Pro Thr Ser Leu Ser Ala Gln Trp Thr Pro
1730      1735      1740
Pro Asn Val Gln Leu Thr Gly Tyr Arg Val Arg Val Thr Pro Lys Glu
1745      1750      1755      1760
Lys Thr Gly Pro Met Lys Glu Ile Asn Leu Ala Pro Asp Ser Ser Ser
1765      1770      1775
Val Val Val Ser Gly Leu Met Val Ala Thr Lys Tyr Glu Val Ser Val
1780      1785      1790
Tyr Ala Leu Lys Asp Thr Leu Thr Ser Arg Pro Ala Gln Gly Val Val
1795      1800      1805
Thr Thr Leu Glu Asn Val Ser Pro Pro Arg Arg Ala Arg Val Thr Asp
1810      1815      1820
Ala Thr Glu Thr Thr Ile Thr Ile Ser Trp Arg Thr Lys Thr Glu Thr
1825      1830      1835      1840
Ile Thr Gly Phe Gln Val Asp Ala Val Pro Ala Asn Gly Gln Thr Pro
1845      1850      1855
Ile Gln Arg Thr Ile Lys Pro Asp Val Arg Ser Tyr Thr Ile Thr Gly
1860      1865      1870
Leu Gln Pro Gly Thr Asp Tyr Lys Ile Tyr Leu Tyr Thr Leu Asn Asp
1875      1880      1885
Asn Ala Arg Ser Ser Pro Val Val Ile Asp Ala Ser Thr Ala Ile Asp
1890      1895      1900
Ala Pro Ser Asn Leu Arg Phe Leu Ala Thr Thr Pro Asn Ser Leu Leu
1905      1910      1915      1920
Val Ser Trp Gln Pro Pro Arg Ala Arg Ile Thr Gly Tyr Ile Ile Lys
1925      1930      1935
Tyr Glu Lys Pro Gly Ser Pro Pro Arg Glu Val Val Pro Arg Pro Arg
1940      1945      1950
Pro Gly Val Thr Glu Ala Thr Ile Thr Gly Leu Glu Pro Gly Thr Glu
1955      1960      1965
Tyr Thr Ile Tyr Val Ile Ala Leu Lys Asn Asn Gln Lys Ser Glu Pro
1970      1975      1980
Leu Ile Gly Arg Lys Lys Thr Asp Glu Leu Pro Gln Leu Val Thr Leu
1985      1990      1995      2000

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Sequence listing.txt

Pro His Pro Asn Leu His Gly Pro Glu Ile Leu Asp Val Pro Ser Thr
2005 2010 2015
Val Gln Lys Thr Pro Phe Val Thr His Pro Gly Tyr Asp Thr Gly Asn
2020 2025 2030
Gly Ile Gln Leu Pro Gly Thr Ser Gly Gln Gln Pro Ser Val Gly Gln
2035 2040 2045
Gln Met Ile Phe Glu Glu His Gly Phe Arg Arg Thr Thr Pro Pro Thr
2050 2055 2060
Thr Ala Thr Pro Ile Arg His Arg Pro Arg Pro Tyr Pro Pro Asn Val
2065 2070 2075 2080
Gly Gln Glu Ala Leu Ser Gln Thr Thr Ile Ser Trp Ala Pro Phe Gln
2085 2090 2095
Asp Thr Ser Glu Tyr Ile Ile Ser Cys His Pro Val Gly Thr Asp Glu
2100 2105 2110
Glu Pro Leu Gln Phe Arg Val Pro Gly Thr Ser Thr Ser Ala Thr Leu
2115 2120 2125
Thr Gly Leu Thr Arg Gly Ala Thr Tyr Asn Ile Ile Val Glu Ala Leu
2130 2135 2140
Lys Asp Gln Gln Arg His Lys Val Arg Glu Glu Val Val Thr Val Gly
2145 2150 2155 2160
Asn Ser Val Asn Glu Gly Leu Asn Gln Pro Thr Asp Asp Ser Cys Phe
2165 2170 2175
Asp Pro Tyr Thr Val Ser His Tyr Ala Val Gly Asp Glu Trp Glu Arg
2180 2185 2190
Met Ser Glu Ser Gly Phe Lys Leu Leu Cys Gln Cys Leu Gly Phe Gly
2195 2200 2205
Ser Gly His Phe Arg Cys Asp Ser Ser Arg Trp Cys His Asp Asn Gly
2210 2215 2220
Val Asn Tyr Lys Ile Gly Glu Lys Trp Asp Arg Gln Gly Glu Asn Gly
2225 2230 2235 2240
Gln Met Met Ser Cys Thr Cys Leu Gly Asn Gly Lys Gly Glu Phe Lys
2245 2250 2255
Cys Asp Pro His Glu Ala Thr Cys Tyr Asp Asp Gly Lys Thr Tyr His
2260 2265 2270
Val Gly Glu Gln Trp Gln Lys Glu Tyr Leu Gly Ala Ile Cys Ser Cys
2275 2280 2285
Thr Cys Phe Gly Gly Gln Arg Gly Trp Arg Cys Asp Asn Cys Arg Arg
2290 2295 2300
Pro Gly Gly Glu Pro Ser Pro Glu Gly Thr Thr Gly Gln Ser Tyr Asn
2305 2310 2315 2320
Gln Tyr Ser Gln Arg Tyr His Gln Arg Thr Asn Thr Asn Val Asn Cys
2325 2330 2335
Pro Ile Glu Cys Phe Met Pro Leu Asp Val Gln Ala Asp Arg Glu Asp
2340 2345 2350
Ser Arg Glu
2355

<210> 95
<211> 1366
<212> PRT
<213> Homo sapiens

<400> 95
Met Leu Ser Phe Val Asp Thr Arg Thr Leu Leu Leu Leu Ala Val Thr
1 5 10 15
Leu Cys Leu Ala Thr Cys Gln Ser Leu Gln Glu Glu Thr Val Arg Lys
20 25 30
Gly Pro Ala Gly Asp Arg Gly Pro Arg Gly Glu Arg Gly Pro Pro Gly
35 40 45
Pro Pro Gly Arg Asp Gly Glu Asp Gly Pro Thr Gly Pro Pro Gly Pro
50 55 60
Pro Gly Pro Pro Gly Pro Pro Gly Leu Gly Gly Asn Phe Ala Ala Gln

Sequence listing.txt

```

65      70      75      80
Tyr Asp Gly Lys Gly Val Gly Leu Gly Pro Gly Pro Met Gly Leu Met
      85      90      95
Gly Pro Arg Gly Pro Pro Gly Ala Ala Gly Ala Pro Gly Pro Gln Gly
      100      105
Phe Gln Gly Pro Ala Gly Glu Pro Gly Glu Pro Gly Gln Thr Gly Pro
      115      120      125
Ala Gly Ala Arg Gly Pro Ala Gly Pro Pro Gly Lys Ala Gly Glu Asp
      130      135      140
Gly His Pro Gly Lys Pro Gly Arg Pro Gly Glu Arg Gly Val Val Gly
      145      150      155
Pro Gln Gly Ala Arg Gly Phe Pro Gly Thr Pro Gly Leu Pro Gly Phe
      165      170      175
Lys Gly Ile Arg Gly His Asn Gly Leu Asp Gly Leu Lys Gly Gln Pro
      180      185      190
Gly Ala Pro Gly Val Lys Gly Glu Pro Gly Ala Pro Gly Glu Asn Gly
      195      200      205
Thr Pro Gly Gln Thr Gly Ala Arg Gly Leu Pro Gly Glu Arg Gly Arg
      210      215      220
Val Gly Ala Pro Gly Pro Ala Gly Ala Arg Gly Ser Asp Gly Ser Val
      225      230      235
Gly Pro Val Gly Pro Ala Gly Pro Ile Gly Ser Ala Gly Pro Pro Gly
      245      250      255
Phe Pro Gly Ala Pro Gly Pro Lys Gly Glu Ile Gly Ala Val Gly Asn
      260      265      270
Ala Gly Pro Ala Gly Pro Ala Gly Pro Arg Gly Glu Val Gly Leu Pro
      275      280      285
Gly Leu Ser Gly Pro Val Gly Pro Pro Gly Asn Pro Gly Ala Asn Gly
      290      295      300
Leu Thr Gly Ala Lys Gly Ala Ala Gly Leu Pro Gly Val Ala Gly Ala
      305      310      315
Pro Gly Leu Pro Gly Pro Arg Gly Ile Pro Gly Pro Val Gly Ala Ala
      325      330      335
Gly Ala Thr Gly Ala Arg Gly Leu Val Gly Glu Pro Gly Pro Ala Gly
      340      345      350
Ser Lys Gly Glu Ser Gly Asn Lys Gly Glu Pro Gly Ser Ala Gly Pro
      355      360      365
Gln Gly Pro Pro Gly Pro Ser Gly Glu Glu Gly Lys Arg Gly Pro Asn
      370      375      380
Gly Glu Ala Gly Ser Ala Gly Pro Pro Gly Pro Pro Gly Leu Arg Gly
      385      390      395
Ser Pro Gly Ser Arg Gly Leu Pro Gly Ala Asp Gly Arg Ala Gly Val
      405      410      415
Met Gly Pro Pro Gly Ser Arg Gly Ala Ser Gly Pro Ala Gly Val Arg
      420      425      430
Gly Pro Asn Gly Asp Ala Gly Arg Pro Gly Glu Pro Gly Leu Met Gly
      435      440      445
Pro Arg Gly Leu Pro Gly Ser Pro Gly Asn Ile Gly Pro Ala Gly Lys
      450      455      460
Glu Gly Pro Val Gly Leu Pro Gly Ile Asp Gly Arg Pro Gly Pro Ile
      465      470      475
Gly Pro Ala Gly Ala Arg Gly Glu Pro Gly Asn Ile Gly Phe Pro Gly
      485      490      495
Pro Lys Gly Pro Thr Gly Asp Pro Gly Lys Asn Gly Asp Lys Gly His
      500      505      510
Ala Gly Leu Ala Gly Ala Arg Gly Ala Pro Gly Pro Asp Gly Asn Asn
      515      520      525
Gly Ala Gln Gly Pro Pro Gly Pro Gln Gly Val Gln Gly Gly Lys Gly
      530      535      540
Glu Gln Gly Pro Ala Gly Pro Pro Gly Phe Gln Gly Leu Pro Gly Pro
      545      550      555
Ser Gly Pro Ala Gly Glu Val Gly Lys Pro Gly Glu Arg Gly Leu His
      565      570      575

```

Sequence listing.txt

Gly Glu Phe Gly Leu Pro Gly Pro Ala Gly Pro Arg Gly Glu Arg Gly
 580 585 590
 Pro Pro Gly Glu Ser Gly Ala Ala Gly Pro Thr Gly Pro Ile Gly Ser
 595 600 605
 Arg Gly Pro Ser Gly Pro Pro Gly Pro Asp Gly Asn Lys Gly Glu Pro
 610 615 620
 Gly Val Val Gly Ala Val Gly Thr Ala Gly Pro Ser Gly Pro Ser Gly
 625 630 635 640
 Leu Pro Gly Glu Arg Gly Ala Ala Gly Ile Pro Gly Gly Lys Gly Glu
 645 650 655
 Lys Gly Glu Pro Gly Leu Arg Gly Glu Ile Gly Asn Pro Gly Arg Asp
 660 665 670
 Gly Ala Arg Gly Ala His Gly Ala Val Gly Ala Pro Gly Pro Ala Gly
 675 680 685
 Ala Thr Gly Asp Arg Gly Glu Ala Gly Ala Ala Gly Pro Ala Gly Pro
 690 695 700
 Ala Gly Pro Arg Gly Ser Pro Gly Glu Arg Gly Glu Val Gly Pro Ala
 705 710 715 720
 Gly Pro Asn Gly Phe Ala Gly Pro Ala Gly Ala Ala Gly Gln Pro Gly
 725 730 735
 Ala Lys Gly Glu Arg Gly Ala Lys Gly Pro Lys Gly Glu Asn Gly Val
 740 745 750
 Val Gly Pro Thr Gly Pro Val Gly Ala Ala Gly Pro Ala Gly Pro Asn
 755 760 765
 Gly Pro Pro Gly Pro Ala Gly Ser Arg Gly Asp Gly Gly Pro Pro Gly
 770 775 780
 Met Thr Gly Phe Pro Gly Ala Ala Gly Arg Thr Gly Pro Pro Gly Pro
 785 790 795 800
 Ser Gly Ile Ser Gly Pro Pro Gly Pro Pro Gly Pro Ala Gly Lys Glu
 805 810 815
 Gly Leu Arg Gly Pro Arg Gly Asp Gln Gly Pro Val Gly Arg Thr Gly
 820 825 830
 Glu Val Gly Ala Val Gly Pro Pro Gly Phe Ala Gly Glu Lys Gly Pro
 835 840 845
 Ser Gly Glu Ala Gly Thr Ala Gly Pro Pro Gly Thr Pro Gly Pro Gln
 850 855 860
 Gly Leu Leu Gly Ala Pro Gly Ile Leu Gly Leu Pro Gly Ser Arg Gly
 865 870 875 880
 Glu Arg Gly Leu Pro Gly Val Ala Gly Ala Val Gly Glu Pro Gly Pro
 885 890 895
 Leu Gly Ile Ala Gly Pro Pro Gly Ala Arg Gly Pro Pro Gly Ala Val
 900 905 910
 Gly Ser Pro Gly Val Asn Gly Ala Pro Gly Glu Ala Gly Arg Asp Gly
 915 920 925
 Asn Pro Gly Asn Asp Gly Pro Pro Gly Arg Asp Gly Gln Pro Gly His
 930 935 940
 Lys Gly Glu Arg Gly Tyr Pro Gly Asn Ile Gly Pro Val Gly Ala Ala
 945 950 955 960
 Gly Ala Pro Gly Pro His Gly Pro Val Gly Pro Ala Gly Lys His Gly
 965 970 975
 Asn Arg Gly Glu Thr Gly Pro Ser Gly Pro Val Gly Pro Ala Gly Ala
 980 985 990
 Val Gly Pro Arg Gly Pro Ser Gly Pro Gln Gly Ile Arg Gly Asp Lys
 995 1000 1005
 Gly Glu Pro Gly Glu Lys Gly Pro Arg Gly Leu Pro Gly Leu Lys Gly
 1010 1015 1020
 His Asn Gly Leu Gln Gly Leu Pro Gly Ile Ala Gly His His Gly Asp
 1025 1030 1035 1040
 Gln Gly Ala Pro Gly Ser Val Gly Pro Ala Gly Pro Arg Gly Pro Ala
 1045 1050 1055
 Gly Pro Ser Gly Pro Ala Gly Lys Asp Gly Arg Thr Gly His Pro Gly
 1060 1065 1070
 Thr Val Gly Pro Ala Gly Ile Arg Gly Pro Gln Gly His Gln Gly Pro

Sequence listing.txt

```

1075      1080      1085
Ala Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Val Ser
1090      1095      1100
Gly Gly Gly Tyr Asp Phe Gly Tyr Asp Gly Asp Phe Tyr Arg Ala Asp
1105      1110      1115
Gln Pro Arg Ser Ala Pro Ser Leu Arg Pro Lys Asp Tyr Glu Val Asp
1125      1130      1135
Ala Thr Leu Lys Ser Leu Asn Asn Gln Ile Glu Thr Leu Leu Thr Pro
1140      1145      1150
Glu Gly Ser Arg Lys Asn Pro Ala Arg Thr Cys Arg Asp Leu Arg Leu
1155      1160      1165
Ser His Pro Glu Trp Ser Ser Gly Tyr Tyr Trp Ile Asp Pro Asn Gln
1170      1175      1180
Gly Cys Thr Met Asp Ala Ile Lys Val Tyr Cys Asp Phe Ser Thr Gly
1185      1190      1195
Glu Thr Cys Ile Arg Ala Gln Pro Glu Asn Ile Pro Ala Lys Asn Trp
1205      1210      1215
Tyr Arg Ser Ser Lys Asp Lys Lys His Val Trp Leu Gly Glu Thr Ile
1220      1225      1230
Asn Ala Gly Ser Gln Phe Glu Tyr Asn Val Glu Gly Val Thr Ser Lys
1235      1240      1245
Glu Met Ala Thr Gln Leu Ala Phe Met Arg Leu Leu Ala Asn Tyr Ala
1250      1255      1260
Ser Gln Asn Ile Thr Tyr His Cys Lys Asn Ser Ile Ala Tyr Met Asp
1265      1270      1275
Glu Glu Thr Gly Asn Leu Lys Lys Ala Val Ile Leu Gln Gly Ser Asn
1285      1290      1295
Asp Val Glu Leu Val Ala Glu Gly Asn Ser Arg Phe Thr Tyr Thr Val
1300      1305      1310
Leu Val Asp Gly Cys Ser Lys Lys Thr Asn Glu Trp Gly Lys Thr Ile
1315      1320      1325
Ile Glu Tyr Lys Thr Asn Lys Pro Ser Arg Leu Pro Phe Leu Asp Ile
1330      1335      1340
Ala Pro Leu Asp Ile Gly Gly Ala Asp His Glu Phe Phe Val Asp Ile
1345      1350      1355
Gly Pro Val Cys Phe Lys
1365

```

<210> 96
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 96
Met Ala Lys Ile Ser Ser Pro Thr Glu Thr Glu Arg Cys Ile Glu Ser
1 5 10 15
Leu Ile Ala Val Phe Gln Lys Tyr Ala Gly Lys Asp Gly Tyr Asn Tyr
20 25 30
Thr Leu Ser Lys Thr Glu Phe Leu Ser Phe Met Asn Thr Glu Leu Ala
35 40 45
Ala Phe Thr Lys Asn Gln Lys Asp Pro Gly Val Leu Asp Arg Met Met
50 55 60
Lys Lys Leu Asp Thr Asn Ser Asp Gly Gln Leu Asp Phe Ser Glu Phe
65 70 75 80
Leu Asn Leu Ile Gly Gly Leu Ala Met Ala Cys His Asp Ser Phe Leu
85 90 95
Lys Ala Val Pro Ser Gln Lys Arg Thr
100 105

```

<210> 97
 <211> 283

Sequence listing.txt

<212> PRT

<213> Homo sapiens

<400> 97

```

Met Val Asn Tyr Ala Trp Ala Gly Arg Ser Gln Arg Lys Leu Trp Trp
 1      5      10      15
Arg Ser Val Ala Val Leu Thr Cys Lys Ser Val Val Arg Pro Gly Tyr
      20      25      30
Arg Gly Gly Leu Gln Ala Arg Arg Ser Thr Leu Leu Lys Thr Cys Ala
      35      40      45
Arg Ala Arg Ala Thr Ala Pro Gly Ala Met Lys Met Val Ala Pro Trp
      50      55      60
Thr Arg Phe Tyr Ser Asn Ser Cys Cys Leu Cys Cys His Val Arg Thr
      65      70      75      80
Gly Thr Ile Leu Leu Gly Val Trp Tyr Leu Ile Ile Asn Ala Val Val
      85      90      95
Leu Leu Ile Leu Leu Ser Ala Leu Ala Asp Pro Asp Gln Tyr Asn Phe
      100      105      110
Ser Ser Ser Glu Leu Gly Gly Asp Phe Glu Phe Met Asp Asp Ala Asn
      115      120      125
Met Cys Ile Ala Ile Ala Ile Ser Leu Leu Met Ile Leu Ile Cys Ala
      130      135      140
Met Ala Thr Tyr Gly Ala Tyr Lys Gln Arg Ala Ala Trp Ile Ile Pro
      145      150      155      160
Phe Phe Cys Tyr Gln Ile Phe Asp Phe Ala Leu Asn Met Leu Val Ala
      165      170      175
Ile Thr Val Leu Ile Tyr Pro Asn Ser Ile Gln Glu Tyr Ile Arg Gln
      180      185      190
Leu Pro Pro Asn Phe Pro Tyr Arg Asp Asp Val Met Ser Val Asn Pro
      195      200      205
Thr Cys Leu Val Leu Ile Ile Leu Leu Phe Ile Ser Ile Ile Leu Thr
      210      215      220
Phe Lys Gly Tyr Leu Ile Ser Cys Val Trp Asn Cys Tyr Arg Tyr Ile
      225      230      235      240
Asn Gly Arg Asn Ser Ser Asp Val Leu Val Tyr Val Thr Ser Asn Asp
      245      250      255
Thr Thr Val Leu Leu Pro Pro Tyr Asp Asp Ala Thr Val Asn Gly Ala
      260      265      270
Ala Lys Glu Pro Pro Pro Pro Tyr Val Ser Ala
      275      280

```

<210> 98

<211> 712

<212> PRT

<213> Homo sapiens

<400> 98

```

Met Ala Gly Gly Pro Gly Pro Gly Glu Pro Ala Ala Pro Gly Ala Gln
 1      5      10      15
His Phe Leu Tyr Glu Val Pro Pro Trp Val Met Cys Arg Phe Tyr Lys
      20      25      30
Val Met Asp Ala Leu Glu Pro Ala Asp Trp Cys Gln Phe Ala Ala Leu
      35      40      45
Ile Val Arg Asp Gln Thr Glu Leu Arg Leu Cys Glu Arg Ser Gly Gln
      50      55      60
Arg Thr Ala Ser Val Leu Trp Pro Trp Ile Asn Arg Asn Ala Arg Val
      65      70      75      80
Ala Asp Leu Val His Ile Leu Thr His Leu Gln Leu Leu Arg Ala Arg
      85      90      95
Asp Ile Ile Thr Ala Trp His Pro Pro Ala Pro Leu Pro Ser Pro Gly
      100      105      110
Thr Thr Ala Pro Arg Pro Ser Ser Ile Pro Ala Pro Ala Glu Ala Glu

```


Sequence listing.txt

Ala	Trp	Ser	Pro	Arg	Lys	Leu	Pro	Ser	Ser	Ala	Ser	Thr	Phe	Leu	Ser
130	115					120					125				
Pro	Ala	Phe	Pro	Gly	Ser	Gln	Thr	His	Ser	Gly	Pro	Glu	Leu	Gly	Leu
145					150					155					160
Val	Pro	Ser	Pro	Ala	Ser	Leu	Trp	Pro	Pro	Pro	Pro	Ser	Pro	Ala	Pro
				165					170					175	
Ser	Ser	Thr	Lys	Pro	Gly	Pro	Glu	Ser	Ser	Val	Ser	Leu	Leu	Gln	Gly
			180					185					190		
Ala	Arg	Pro	Ser	Pro	Phe	Cys	Trp	Pro	Leu	Cys	Glu	Ile	Ser	Arg	Gly
		195					200					205			
Thr	His	Asn	Phe	Ser	Glu	Glu	Leu	Lys	Ile	Gly	Glu	Gly	Gly	Phe	Gly
	210					215					220				
Cys	Val	Tyr	Arg	Ala	Val	Met	Arg	Asn	Thr	Val	Tyr	Ala	Val	Lys	Arg
225					230					235					240
Leu	Lys	Glu	Asn	Ala	Asp	Leu	Glu	Trp	Thr	Ala	Val	Lys	Gln	Ser	Phe
				245					250					255	
Leu	Thr	Glu	Val	Glu	Gln	Leu	Ser	Arg	Phe	Arg	His	Pro	Asn	Ile	Val
			260					265					270		
Asp	Phe	Ala	Gly	Tyr	Cys	Ala	Gln	Asn	Gly	Phe	Tyr	Cys	Leu	Val	Tyr
		275					280					285			
Gly	Phe	Leu	Pro	Asn	Gly	Ser	Leu	Glu	Asp	Arg	Leu	His	Cys	Gln	Thr
	290					295					300				
Gln	Ala	Cys	Pro	Pro	Leu	Ser	Trp	Pro	Gln	Arg	Leu	Asp	Ile	Leu	Leu
305					310					315					320
Gly	Thr	Ala	Arg	Ala	Ile	Gln	Phe	Leu	His	Gln	Asp	Ser	Pro	Ser	Leu
				325					330					335	
Ile	His	Gly	Asp	Ile	Lys	Ser	Ser	Asn	Val	Leu	Leu	Asp	Glu	Arg	Leu
			340					345					350		
Thr	Pro	Lys	Leu	Gly	Asp	Phe	Gly	Leu	Ala	Arg	Phe	Ser	Arg	Phe	Ala
		355					360					365			
Gly	Ser	Ser	Pro	Ser	Gln	Ser	Ser	Met	Val	Ala	Arg	Thr	Gln	Thr	Val
	370					375					380				
Arg	Gly	Thr	Leu	Ala	Tyr	Leu	Pro	Glu	Glu	Tyr	Ile	Lys	Thr	Gly	Arg
385					390					395					400
Leu	Ala	Val	Asp	Thr	Asp	Thr	Phe	Ser	Phe	Gly	Val	Val	Val	Leu	Glu
				405					410					415	
Thr	Leu	Ala	Gly	Gln	Arg	Ala	Val	Lys	Thr	His	Gly	Ala	Arg	Thr	Lys
			420					425					430		
Tyr	Leu	Lys	Asp	Leu	Val	Glu	Glu	Ala	Glu	Glu	Ala	Gly	Val	Ala	
		435					440				445				
Leu	Arg	Ser	Thr	Gln	Ser	Thr	Leu	Gln	Ala	Gly	Leu	Ala	Ala	Asp	Ala
	450					455					460				
Trp	Ala	Ala	Pro	Ile	Ala	Met	Gln	Ile	Tyr	Lys	Lys	His	Leu	Asp	Pro
465					470					475					480
Arg	Pro	Gly	Pro	Cys	Pro	Pro	Glu	Leu	Gly	Leu	Gly	Leu	Gly	Gln	Leu
				485					490					495	
Ala	Cys	Cys	Cys	Leu	His	Arg	Arg	Ala	Lys	Arg	Arg	Pro	Pro	Met	Thr
			500					505					510		
Gln	Val	Tyr	Glu	Arg	Leu	Glu	Lys	Leu	Gln	Ala	Val	Val	Ala	Gly	Val
		515					520					525			
Pro	Gly	His	Leu	Glu	Ala	Ala	Ser	Cys	Ile	Pro	Pro	Ser	Pro	Gln	Glu
	530					535					540				
Asn	Ser	Tyr	Val	Ser	Ser	Thr	Gly	Arg	Ala	His	Ser	Gly	Ala	Ala	Pro
545					550					555					560
Trp	Gln	Pro	Leu	Ala	Ala	Pro	Ser	Gly	Ala	Ser	Ala	Gln	Ala	Ala	Glu
				565					570					575	
Gln	Leu	Gln	Arg	Gly	Pro	Asn	Gln	Pro	Val	Glu	Ser	Asp	Glu	Ser	Leu
			580					585					590		
Gly	Gly	Leu	Ser	Ala	Ala	Leu	Arg	Ser	Trp	His	Leu	Thr	Pro	Ser	Cys
		595					600					605			
Pro	Leu	Asp	Pro	Ala	Pro	Leu	Arg	Glu	Ala	Gly	Cys	Pro	Gln	Gly	Asp
	610					615					620				

Sequence listing.txt

Thr Ala Gly Glu Ser Ser Trp Gly Ser Gly Pro Gly Ser Arg Pro Thr
625 630 635 640
Ala Val Glu Gly Leu Ala Leu Gly Ser Ser Ala Ser Ser Ser Ser Glu
645 650 655
Pro Pro Gln Ile Ile Asn Pro Ala Arg Gln Lys Met Val Gln Lys
660 665 670
Leu Ala Leu Tyr Glu Asp Gly Ala Leu Asp Ser Leu Gln Leu Leu Ser
675 680 685
Ser Ser Ser Leu Pro Gly Leu Gly Leu Glu Gln Asp Arg Gln Gly Pro
690 695 700
Glu Glu Ser Asp Glu Phe Gln Ser
705 710

<210> 99
<211> 132
<212> PRT
<213> Homo sapiens

<400> 99
Met Asn His Ile Val Gln Thr Phe Ser Pro Val Asn Ser Gly Gln Pro
1 5 10 15
Pro Asn Tyr Glu Met Leu Lys Glu Glu Gln Glu Val Ala Met Leu Gly
20 25 30
Gly Pro His Asn Pro Ala Pro Pro Thr Ser Thr Val Ile His Ile Arg
35 40 45
Ser Glu Thr Ser Val Pro Asp His Val Val Trp Ser Leu Phe Asn Thr
50 55 60
Leu Phe Met Asn Thr Cys Cys Leu Gly Phe Ile Ala Phe Ala Tyr Ser
65 70 75 80
Val Lys Ser Arg Asp Arg Lys Met Val Gly Asp Val Thr Gly Ala Gln
85 90 95
Ala Tyr Ala Ser Thr Ala Lys Cys Leu Asn Ile Trp Ala Leu Ile Leu
100 105 110
Gly Ile Phe Met Thr Ile Leu Leu Val Ile Ile Pro Val Leu Val Val
115 120 125
Gln Ala Gln Arg
130

<210> 100
<211> 207
<212> PRT
<213> Homo sapiens

<400> 100
Met Ala Pro Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp
1 5 10 15
Leu Ile Ala Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln
20 25 30
Thr Ala Phe Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly
35 40 45
Thr Pro Glu Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys
50 55 60
Met Thr Lys Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp
65 70 75 80
Ile Arg Phe Val Tyr Thr Pro Ala Met Glu Ser Val Cys Gly Tyr Phe
85 90 95
His Arg Ser His Asn Arg Ser Glu Glu Phe Leu Ile Ala Gly Lys Leu
100 105 110
Gln Asp Gly Leu Leu His Ile Thr Thr Cys Ser Phe Val Ala Pro Trp
115 120 125
Asn Ser Leu Ser Leu Ala Gln Arg Arg Gly Phe Thr Lys Thr Tyr Thr

Sequence listing.txt

130	135	140															
Val Gly Cys Glu Glu Cys Thr Val Phe Pro Cys Leu Ser Ile Pro Cys																	
145	150	155	160														
Lys Leu Gln Ser Gly Thr His Cys Leu Trp Thr Asp Gln Leu Leu Gln																	
	165	170	175														
Gly Ser Glu Lys Gly Phe Gln Ser Arg His Leu Ala Cys Leu Pro Arg																	
	180	185	190														
Glu Pro Gly Leu Cys Thr Trp Gln Ser Leu Arg Ser Gln Ile Ala																	
	195	200	205														

<210> 101
 <211> 282
 <212> PRT
 <213> Homo sapiens

<400> 101																	
Met Glu Arg Pro Ser Leu Arg Ala Leu Leu Leu Gly Ala Ala Gly Leu																	
1	5	10	15														
Leu Leu Leu Leu Leu Pro Leu Ser Ser Ser Ser Ser Ser Asp Thr Cys																	
	20	25	30														
Gly Pro Cys Glu Pro Ala Ser Cys Pro Pro Leu Pro Pro Leu Gly Cys																	
	35	40	45														
Leu Leu Gly Glu Thr Arg Asp Ala Cys Gly Cys Cys Pro Met Cys Ala																	
	50	55	60														
Arg Gly Glu Gly Glu Pro Cys Gly Gly Gly Gly Ala Gly Arg Gly Tyr																	
	65	70	75														
Cys Ala Pro Gly Met Glu Cys Val Lys Ser Arg Lys Arg Arg Lys Gly																	
	85	90	95														
Lys Ala Gly Ala Ala Ala Gly Gly Pro Gly Val Ser Gly Val Cys Val																	
	100	105	110														
Cys Lys Ser Arg Tyr Pro Val Cys Gly Ser Asp Gly Thr Thr Tyr Pro																	
	115	120	125														
Ser Gly Cys Gln Leu Arg Ala Ser Gln Arg Ala Glu Ser Arg Gly																	
	130	135	140														
Glu Lys Ala Ile Thr Gln Val Ser Lys Gly Thr Cys Glu Gln Gly Pro																	
	145	150	155														
Ser Ile Val Thr Pro Pro Lys Asp Ile Trp Asn Val Thr Gly Ala Gln																	
	165	170	175														
Val Tyr Leu Ser Cys Glu Val Ile Gly Ile Pro Thr Pro Val Leu Ile																	
	180	185	190														
Trp Asn Lys Val Lys Arg Gly His Tyr Gly Val Gln Arg Thr Glu Leu																	
	195	200	205														
Leu Pro Gly Asp Arg Asp Asn Leu Ala Ile Gln Thr Arg Gly Gly Pro																	
	210	215	220														
Glu Lys His Glu Val Thr Gly Trp Val Leu Val Ser Pro Leu Ser Lys																	
	225	230	235														
Glu Asp Ala Gly Glu Tyr Glu Cys His Ala Ser Asn Ser Gln Gly Gln																	
	245	250	255														
Ala Ser Ala Ser Ala Lys Ile Thr Val Val Asp Ala Leu His Glu Ile																	
	260	265	270														
Pro Val Lys Lys Gly Glu Gly Ala Glu Leu																	
	275	280															

<210> 102
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 102																	
Met His Lys Glu Glu His Glu Val Ala Val Leu Gly Ala Pro Pro Ser																	
1	5	10	15														

Sequence listing.txt

Thr	Ile	Leu	Pro	Arg	Ser	Thr	Val	Ile	Asn	Ile	His	Ser	Glu	Thr	Ser
			20					25					30		
Val	Pro	Asp	His	Val	Val	Trp	Ser	Leu	Phe	Asn	Thr	Leu	Phe	Leu	Asn
		35					40					45			
Trp	Cys	Cys	Leu	Gly	Phe	Ile	Ala	Phe	Ala	Tyr	Ser	Val	Lys	Ser	Arg
	50					55					60				
Asp	Arg	Lys	Met	Val	Gly	Asp	Val	Thr	Gly	Ala	Gln	Ala	Tyr	Ala	Ser
65					70				75						80
Thr	Ala	Lys	Cys	Leu	Asn	Ile	Trp	Ala	Leu	Ile	Leu	Gly	Ile	Leu	Met
				85					90					95	
Thr	Ile	Gly	Phe	Ile	Leu	Leu	Leu	Val	Phe	Gly	Ser	Val	Thr	Val	Tyr
			100					105					110		
His	Ile	Met	Leu	Gln	Ile	Ile	Gln	Glu	Lys	Arg	Gly	Tyr			
		115					120					125			

<210> 103

<211> 1466

<212> PRT

<213> Homo sapiens

<400> 103

Met	Met	Ser	Phe	Val	Gln	Lys	Gly	Ser	Trp	Leu	Leu	Leu	Ala	Leu	Leu
1				5					10					15	
His	Pro	Thr	Ile	Ile	Leu	Ala	Gln	Gln	Glu	Ala	Val	Glu	Gly	Gly	Cys
			20					25					30		
Ser	His	Leu	Gly	Gln	Ser	Tyr	Ala	Asp	Arg	Asp	Val	Trp	Lys	Pro	Glu
		35					40				45				
Pro	Cys	Gln	Ile	Cys	Val	Cys	Asp	Ser	Gly	Ser	Val	Leu	Cys	Asp	Asp
	50					55					60				
Ile	Ile	Cys	Asp	Asp	Gln	Glu	Leu	Asp	Cys	Pro	Asn	Pro	Glu	Ile	Pro
65					70				75						80
Phe	Gly	Glu	Cys	Cys	Ala	Val	Cys	Pro	Gln	Pro	Pro	Thr	Ala	Pro	Thr
				85					90					95	
Arg	Pro	Pro	Asn	Gly	Gln	Gly	Pro	Gln	Gly	Pro	Lys	Gly	Asp	Pro	Gly
			100					105					110		
Pro	Pro	Gly	Ile	Pro	Gly	Arg	Asn	Gly	Asp	Pro	Gly	Ile	Pro	Gly	Gln
		115					120					125			
Pro	Gly	Ser	Pro	Gly	Ser	Pro	Gly	Pro	Pro	Gly	Ile	Cys	Glu	Ser	Cys
	130					135					140				
Pro	Thr	Gly	Pro	Gln	Asn	Tyr	Ser	Pro	Gln	Tyr	Asp	Ser	Tyr	Asp	Val
145					150					155					160
Lys	Ser	Gly	Val	Ala	Val	Gly	Gly	Leu	Ala	Gly	Tyr	Pro	Gly	Pro	Ala
				165					170					175	
Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Thr	Ser	Gly	His	Pro	Gly
			180						185				190		
Ser	Pro	Gly	Ser	Pro	Gly	Tyr	Gln	Gly	Pro	Pro	Gly	Glu	Pro	Gly	Gln
		195					200					205			
Ala	Gly	Pro	Ser	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ala	Ile	Gly	Pro	Ser
	210					215					220				
Gly	Pro	Ala	Gly	Lys	Asp	Gly	Glu	Ser	Gly	Arg	Pro	Gly	Arg	Pro	Gly
225					230					235					240
Glu	Arg	Gly	Leu	Pro	Gly	Pro	Pro	Gly	Ile	Lys	Gly	Pro	Ala	Gly	Ile
				245					250					255	
Pro	Gly	Phe	Pro	Gly	Met	Lys	Gly	His	Arg	Gly	Phe	Asp	Gly	Arg	Asn
			260					265					270		
Gly	Glu	Lys	Gly	Glu	Thr	Gly	Ala	Pro	Gly	Leu	Lys	Gly	Glu	Asn	Gly
		275					280					285			
Leu	Pro	Gly	Glu	Asn	Gly	Ala	Pro	Gly	Pro	Met	Gly	Pro	Arg	Gly	Ala
	290					295					300				
Pro	Gly	Glu	Arg	Gly	Arg	Pro	Gly	Leu	Pro	Gly	Ala	Ala	Gly	Ala	Arg
305					310					315					320
Gly	Asn	Asp	Gly	Ala	Arg	Gly	Ser	Asp	Gly	Gln	Pro	Gly	Pro	Pro	Gly

Sequence listing.txt

325
 Pro Pro Gly Thr Ala Gly Phe Pro Gly Ser Pro Gly Ala Lys Gly Glu
 340
 Val Gly Pro Ala Gly Ser Pro Gly Ser Asn Gly Ala Pro Gly Gln Arg
 355
 Gly Glu Pro Gly Pro Gln Gly His Ala Gly Ala Gln Gly Pro Pro Gly
 370
 Pro Pro Gly Ile Asn Gly Ser Pro Gly Gly Lys Gly Glu Met Gly Pro
 385 390
 Ala Gly Ile Pro Gly Ala Pro Gly Leu Met Gly Ala Arg Gly Pro Pro
 405
 Gly Pro Ala Gly Ala Asn Gly Ala Pro Gly Leu Arg Gly Gly Ala Gly
 420
 Glu Pro Gly Lys Asn Gly Ala Lys Gly Glu Pro Gly Pro Arg Gly Glu
 435
 Arg Gly Glu Ala Gly Ile Pro Gly Val Pro Gly Ala Lys Gly Glu Asp
 450
 Gly Lys Asp Gly Ser Pro Gly Glu Pro Gly Ala Asn Gly Leu Pro Gly
 465 470
 Ala Ala Gly Glu Arg Gly Ala Pro Gly Phe Arg Gly Pro Ala Gly Pro
 485
 Asn Gly Ile Pro Gly Glu Lys Gly Pro Ala Gly Glu Arg Gly Ala Pro
 500
 Gly Pro Ala Gly Pro Arg Gly Ala Ala Gly Glu Pro Gly Arg Asp Gly
 515
 Val Pro Gly Gly Pro Gly Met Arg Gly Met Pro Gly Ser Pro Gly Gly
 530
 Pro Gly Ser Asp Gly Lys Pro Gly Pro Pro Gly Ser Gln Gly Glu Ser
 545 550
 Gly Arg Pro Gly Pro Gly Pro Ser Gly Pro Arg Gly Gln Pro Gly
 565
 Val Met Gly Phe Pro Gly Pro Lys Gly Asn Asp Gly Ala Pro Gly Lys
 580
 Asn Gly Glu Arg Gly Gly Pro Gly Gly Pro Gly Pro Gln Gly Pro Pro
 595
 Gly Lys Asn Gly Glu Thr Gly Asp Thr Gly Pro Pro Gly Pro Gln Gly Leu
 610
 Pro Gly Gly Asp Lys Gly Asp Thr Gly Pro Pro Gly Pro Gln Gly Leu
 625 630
 Gln Gly Leu Pro Gly Thr Gly Gly Pro Pro Gly Glu Asn Gly Lys Pro
 645
 Gly Glu Pro Gly Pro Lys Gly Asp Ala Gly Ala Pro Gly Ala Pro Gly
 660
 Gly Lys Gly Asp Ala Gly Ala Pro Gly Glu Arg Gly Pro Pro Gly Leu
 675
 Ala Gly Ala Pro Gly Leu Arg Gly Gly Ala Gly Pro Pro Gly Pro Glu
 690
 Gly Gly Lys Gly Ala Ala Gly Pro Pro Gly Pro Pro Gly Ala Ala Gly
 705 710
 Thr Pro Gly Leu Gln Gly Met Pro Gly Glu Arg Gly Gly Leu Gly Ser
 725
 Pro Gly Pro Lys Gly Asp Lys Gly Glu Pro Gly Gly Pro Gly Ala Asp
 740
 Gly Val Pro Gly Lys Asp Gly Pro Arg Gly Pro Thr Gly Pro Ile Gly
 755
 Pro Pro Gly Pro Ala Gly Gln Pro Gly Asp Lys Gly Glu Gly Gly Ala
 770
 Pro Gly Leu Pro Gly Ile Ala Gly Pro Arg Gly Ser Pro Gly Glu Arg
 785 790
 Gly Glu Thr Gly Pro Pro Gly Pro Ala Gly Phe Pro Gly Ala Pro Gly
 805
 Gln Asn Gly Glu Pro Gly Gly Lys Gly Glu Arg Gly Ala Pro Gly Glu
 820 825 830

Sequence listing.txt

Lys Gly Glu Gly Gly Pro Pro Gly Val Ala Gly Pro Pro Gly Gly Ser
 835 840 845
 Gly Pro Ala Gly Pro Pro Gly Pro Gln Gly Val Lys Gly Glu Arg Gly
 850 855 860
 Ser Pro Gly Gly Pro Gly Ala Ala Gly Phe Pro Gly Ala Arg Gly Leu
 865 870 875 880
 Pro Gly Pro Pro Gly Ser Asn Gly Asn Pro Gly Pro Pro Gly Pro Ser
 885 890 895
 Gly Ser Pro Gly Lys Asp Gly Pro Pro Gly Pro Ala Gly Asn Thr Gly
 900 905 910
 Ala Pro Gly Ser Pro Gly Val Ser Gly Pro Lys Gly Asp Ala Gly Gln
 915 920 925
 Pro Gly Glu Lys Gly Ser Pro Gly Ala Gln Gly Pro Pro Gly Ala Pro
 930 935 940
 Gly Pro Leu Gly Ile Ala Gly Ile Thr Gly Ala Arg Gly Leu Ala Gly
 945 950 955 960
 Pro Pro Gly Met Pro Gly Pro Arg Gly Ser Pro Gly Pro Gln Gly Val
 965 970 975
 Lys Gly Glu Ser Gly Lys Pro Gly Ala Asn Gly Leu Ser Gly Glu Arg
 980 985 990
 Gly Pro Pro Gly Pro Gln Gly Leu Pro Gly Leu Ala Gly Thr Ala Gly
 995 1000 1005
 Glu Pro Gly Arg Asp Gly Asn Pro Gly Ser Asp Gly Leu Pro Gly Arg
 1010 1015 1020
 Asp Gly Ser Pro Gly Gly Lys Gly Asp Arg Gly Glu Asn Gly Ser Pro
 1025 1030 1035 1040
 Gly Ala Pro Gly Ala Pro Gly His Pro Gly Pro Pro Gly Pro Val Gly
 1045 1050 1055
 Pro Ala Gly Lys Ser Gly Asp Arg Gly Glu Ser Gly Pro Ala Gly Pro
 1060 1065 1070
 Ala Gly Ala Pro Gly Pro Ala Gly Ser Arg Gly Ala Pro Gly Pro Gln
 1075 1080 1085
 Gly Pro Arg Gly Asp Lys Gly Glu Thr Gly Glu Arg Gly Ala Ala Gly
 1090 1095 1100
 Ile Lys Gly His Arg Gly Phe Pro Gly Asn Pro Gly Ala Pro Gly Ser
 1105 1110 1115 1120
 Pro Gly Pro Ala Gly Gln Gln Gly Ala Ile Gly Ser Pro Gly Pro Ala
 1125 1130 1135
 Gly Pro Arg Gly Pro Val Gly Pro Ser Gly Pro Pro Gly Lys Asp Gly
 1140 1145 1150
 Thr Ser Gly His Pro Gly Pro Ile Gly Pro Pro Gly Pro Arg Gly Asn
 1155 1160 1165
 Arg Gly Glu Arg Gly Ser Glu Gly Ser Pro Gly His Pro Gly Gln Pro
 1170 1175 1180
 Gly Pro Pro Gly Pro Pro Gly Ala Pro Gly Pro Cys Cys Gly Gly Val
 1185 1190 1195 1200
 Gly Ala Ala Ala Ile Ala Gly Ile Gly Gly Glu Lys Ala Gly Gly Phe
 1205 1210 1215
 Ala Pro Tyr Tyr Gly Asp Glu Pro Met Asp Phe Lys Ile Asn Thr Asp
 1220 1225 1230
 Glu Ile Met Thr Ser Leu Lys Ser Val Asn Gly Gln Ile Glu Ser Leu
 1235 1240 1245
 Ile Ser Pro Asp Gly Ser Arg Lys Asn Pro Ala Arg Asn Cys Arg Asp
 1250 1255 1260
 Leu Lys Phe Cys His Pro Glu Leu Lys Ser Gly Glu Tyr Trp Val Asp
 1265 1270 1275 1280
 Pro Asn Gln Gly Cys Lys Leu Asp Ala Ile Lys Val Phe Cys Asn Met
 1285 1290 1295
 Glu Thr Gly Glu Thr Cys Ile Ser Ala Asn Pro Leu Asn Val Pro Arg
 1300 1305 1310
 Lys His Trp Trp Thr Asp Ser Ser Ala Glu Lys Lys His Val Trp Phe
 1315 1320 1325
 Gly Glu Ser Met Asp Gly Gly Phe Gln Phe Ser Tyr Gly Asn Pro Glu

Sequence listing.txt

```

1330      1335      1340
Leu Pro Glu Asp Val Leu Asp Val Gln Leu Ala Phe Leu Arg Leu Leu
1345      1350      1355      1360
Ser Ser Arg Ala Ser Gln Asn Ile Thr Tyr His Cys Lys Asn Ser Ile
1365      1370      1375
Ala Tyr Met Asp Gln Ala Ser Gly Asn Val Lys Lys Ala Leu Lys Leu
1380      1385      1390
Met Gly Ser Asn Glu Gly Glu Phe Lys Ala Glu Gly Asn Ser Lys Phe
1395      1400      1405
Thr Tyr Thr Val Leu Glu Asp Gly Cys Thr Lys His Thr Gly Glu Trp
1410      1415      1420
Ser Lys Thr Val Phe Glu Tyr Arg Thr Arg Lys Ala Val Arg Leu Pro
1425      1430      1435      1440
Ile Val Asp Ile Ala Pro Tyr Asp Ile Gly Gly Pro Asp Gln Glu Phe
1445      1450      1455
Gly Val Asp Val Gly Pro Val Cys Phe Leu
1460      1465

```

<210> 104
 <211> 272
 <212> PRT
 <213> Homo sapiens

```

<400> 104
Met Val Leu Leu Thr Ala Val Leu Leu Leu Leu Ala Ala Tyr Ala Gly
1      5      10      15
Pro Ala Gln Ser Leu Gly Ser Phe Val His Cys Glu Pro Cys Asp Glu
20      25      30
Lys Ala Leu Ser Met Cys Pro Pro Ser Pro Leu Gly Cys Glu Leu Val
35      40      45
Lys Glu Pro Gly Cys Gly Cys Cys Met Thr Cys Ala Leu Ala Glu Gly
50      55      60
Gln Ser Cys Gly Val Tyr Thr Glu Arg Cys Ala Gln Gly Leu Arg Cys
65      70      75      80
Leu Pro Arg Gln Asp Glu Glu Lys Pro Leu His Ala Leu Leu His Gly
85      90      95
Arg Gly Val Cys Leu Asn Glu Lys Ser Tyr Arg Glu Gln Val Lys Ile
100      105      110
Glu Arg Asp Ser Arg Glu His Glu Pro Thr Thr Ser Glu Met Ala
115      120      125
Glu Glu Thr Tyr Ser Pro Lys Ile Phe Arg Pro Lys His Thr Arg Ile
130      135      140
Ser Glu Leu Lys Ala Glu Ala Val Lys Lys Asp Arg Arg Lys Lys Leu
145      150      155      160
Thr Gln Ser Lys Phe Val Gly Gly Ala Glu Asn Thr Ala His Pro Arg
165      170      175
Ile Ile Ser Ala Pro Glu Met Arg Gln Glu Ser Glu Gln Gly Pro Cys
180      185      190
Arg Arg His Met Glu Ala Ser Leu Gln Glu Leu Lys Ala Ser Pro Arg
195      200      205
Met Val Pro Arg Ala Val Tyr Leu Pro Asn Cys Asp Arg Lys Gly Phe
210      215      220
Tyr Lys Arg Lys Gln Cys Lys Pro Ser Arg Gly Arg Lys Arg Gly Ile
225      230      235      240
Cys Trp Cys Val Asp Lys Tyr Gly Met Lys Leu Pro Gly Met Glu Tyr
245      250      255
Val Asp Gly Asp Phe Gln Cys His Thr Phe Asp Ser Ser Asn Val Glu
260      265      270

```

<210> 105
 <211> 158

Sequence listing.txt

<212> PRT

<213> Homo sapiens

<400> 105

```

Met Ala Ser Arg Ser Met Arg Leu Leu Leu Leu Ser Cys Leu Ala
 1          5          10          15
Lys Thr Gly Val Leu Gly Asp Ile Ile Met Arg Pro Ser Cys Ala Pro
          20          25          30
Gly Trp Phe Tyr His Lys Ser Asn Cys Tyr Gly Tyr Phe Arg Lys Leu
          35          40          45
Arg Asn Trp Ser Asp Ala Glu Leu Glu Cys Gln Ser Tyr Gly Asn Gly
          50          55          60
Ala His Leu Ala Ser Ile Leu Ser Leu Lys Glu Ala Ser Thr Ile Ala
65          70          75          80
Glu Tyr Ile Ser Gly Tyr Gln Arg Ser Gln Pro Ile Trp Ile Gly Leu
          85          90          95
His Asp Pro Gln Lys Arg Gln Gln Trp Gln Trp Ile Asp Gly Ala Met
          100          105          110
Tyr Leu Tyr Arg Ser Trp Ser Gly Lys Ser Met Gly Gly Asn Lys His
          115          120          125
Cys Ala Glu Met Ser Ser Asn Asn Asn Phe Leu Thr Trp Ser Ser Asn
130          135          140
Glu Cys Asn Lys Arg Gln His Phe Leu Cys Lys Tyr Arg Pro
145          150          155

```

<210> 106

<211> 175

<212> PRT

<213> Homo sapiens

<400> 106

```

Met Glu Lys Ile Pro Val Ser Ala Phe Leu Leu Leu Val Ala Leu Ser
 1          5          10          15
Tyr Thr Leu Ala Arg Asp Thr Thr Val Lys Pro Gly Ala Lys Lys Asp
          20          25          30
Thr Lys Asp Ser Arg Pro Lys Leu Pro Gln Thr Leu Ser Arg Gly Trp
          35          40          45
Gly Asp Gln Leu Ile Trp Thr Gln Thr Tyr Glu Glu Ala Leu Tyr Lys
          50          55          60
Ser Lys Thr Ser Asn Lys Pro Leu Met Ile Ile His His Leu Asp Glu
65          70          75          80
Cys Pro His Ser Gln Ala Leu Lys Lys Val Phe Ala Glu Asn Lys Glu
          85          90          95
Ile Gln Lys Leu Ala Glu Gln Phe Val Leu Leu Asn Leu Val Tyr Glu
          100          105          110
Thr Thr Asp Lys His Leu Ser Pro Asp Gly Gln Tyr Val Pro Arg Ile
          115          120          125
Met Phe Val Asp Pro Ser Leu Thr Val Arg Ala Asp Ile Thr Gly Arg
130          135          140
Tyr Ser Asn Arg Leu Tyr Ala Tyr Glu Pro Ala Asp Thr Ala Leu Leu
145          150          155          160
Leu Asp Asn Met Lys Lys Ala Leu Lys Leu Leu Lys Thr Glu Leu
          165          170          175

```

<210> 107

<211> 732

<212> PRT

<213> Homo sapiens

<400> 107

```

Met Pro Glu Glu Thr Gln Thr Gln Asp Gln Pro Met Glu Glu Glu Glu

```


Sequence listing.txt

1				5				10				15			
Val	Glu	Thr	Phe	Ala	Phe	Gln	Ala	Glu	Ile	Ala	Gln	Leu	Met	Ser	Leu
			20					25					30		
Ile	Ile	Asn	Thr	Phe	Tyr	Ser	Asn	Lys	Glu	Ile	Phe	Leu	Arg	Glu	Leu
		35					40					45			
Ile	Ser	Asn	Ser	Ser	Asp	Ala	Leu	Asp	Lys	Ile	Arg	Tyr	Glu	Ser	Leu
	50					55					60				
Thr	Asp	Pro	Ser	Lys	Leu	Asp	Ser	Gly	Lys	Glu	Leu	His	Ile	Asn	Leu
65				70						75				80	
Ile	Pro	Asn	Lys	Gln	Asp	Arg	Thr	Leu	Thr	Ile	Val	Asp	Thr	Gly	Ile
				85					90					95	
Gly	Met	Thr	Lys	Ala	Asp	Leu	Ile	Asn	Asn	Leu	Gly	Thr	Ile	Ala	Lys
			100					105					110		
Ser	Gly	Thr	Lys	Ala	Phe	Met	Glu	Ala	Leu	Gln	Ala	Gly	Ala	Asp	Ile
		115					120					125			
Ser	Met	Ile	Gly	Gln	Phe	Gly	Val	Gly	Phe	Tyr	Ser	Ala	Tyr	Leu	Val
	130					135					140				
Ala	Glu	Lys	Val	Thr	Val	Ile	Thr	Lys	His	Asn	Asp	Glu	Gln	Tyr	
145				150						155				160	
Ala	Trp	Glu	Ser	Ser	Ala	Gly	Gly	Ser	Phe	Thr	Val	Arg	Thr	Asp	Thr
				165					170					175	
Gly	Glu	Pro	Met	Gly	Arg	Gly	Thr	Lys	Val	Ile	Leu	His	Leu	Lys	Glu
			180					185					190		
Asp	Gln	Thr	Glu	Tyr	Leu	Glu	Glu	Arg	Arg	Ile	Lys	Glu	Ile	Val	Lys
		195					200					205			
Lys	His	Ser	Gln	Phe	Ile	Gly	Tyr	Pro	Ile	Thr	Leu	Phe	Val	Glu	Lys
	210					215					220				
Glu	Arg	Asp	Lys	Glu	Val	Ser	Asp	Asp	Glu	Ala	Glu	Glu	Lys	Glu	Asp
225				230						235				240	
Lys	Glu	Glu	Glu	Lys	Glu	Lys	Glu	Glu	Lys	Glu	Ser	Glu	Asp	Lys	Pro
			245					250					255		
Glu	Ile	Glu	Asp	Val	Gly	Ser	Asp	Glu	Glu	Glu	Glu	Lys	Lys	Asp	Gly
			260					265					270		
Asp	Lys	Lys	Lys	Lys	Lys	Lys	Ile	Lys	Glu	Lys	Tyr	Ile	Asp	Gln	Glu
		275					280					285			
Glu	Leu	Asn	Lys	Thr	Lys	Pro	Ile	Trp	Thr	Arg	Asn	Pro	Asp	Asp	Ile
	290					295					300				
Thr	Asn	Glu	Glu	Tyr	Gly	Glu	Phe	Tyr	Lys	Ser	Leu	Thr	Asn	Asp	Trp
305				310						315				320	
Glu	Asp	His	Leu	Ala	Val	Lys	His	Phe	Ser	Val	Glu	Gly	Gln	Leu	Glu
				325					330					335	
Phe	Arg	Ala	Leu	Leu	Phe	Val	Pro	Arg	Arg	Ala	Pro	Phe	Asp	Leu	Phe
			340					345					350		
Glu	Asn	Arg	Lys	Lys	Lys	Asn	Asn	Ile	Lys	Leu	Tyr	Val	Arg	Arg	Val
		355					360					365			
Phe	Ile	Met	Asp	Asn	Cys	Glu	Glu	Leu	Ile	Pro	Glu	Tyr	Leu	Asn	Phe
	370					375					380				
Ile	Arg	Gly	Val	Val	Asp	Ser	Glu	Asp	Leu	Pro	Leu	Asn	Ile	Ser	Arg
385				390						395				400	
Glu	Met	Leu	Gln	Gln	Ser	Lys	Ile	Leu	Lys	Val	Ile	Arg	Lys	Asn	Leu
			405						410				415		
Val	Lys	Lys	Cys	Leu	Glu	Leu	Phe	Thr	Glu	Leu	Ala	Glu	Asp	Lys	Glu
			420					425					430		
Asn	Tyr	Lys	Lys	Phe	Tyr	Glu	Gln	Phe	Ser	Lys	Asn	Ile	Lys	Leu	Gly
		435					440					445			
Ile	His	Glu	Asp	Ser	Gln	Asn	Arg	Lys	Lys	Leu	Ser	Glu	Leu	Leu	Arg
	450					455					460				
Tyr	Tyr	Thr	Ser	Ala	Ser	Gly	Asp	Glu	Met	Val	Ser	Leu	Lys	Asp	Tyr
465				470						475				480	
Cys	Thr	Arg	Met	Lys	Glu	Asn	Gln	Lys	His	Ile	Tyr	Tyr	Ile	Thr	Gly
			485						490					495	
Glu	Thr	Lys	Asp	Gln	Val	Ala	Asn	Ser	Ala	Phe	Val	Glu	Arg	Leu	Arg
			500					505					510		

Sequence listing.txt

Lys His Gly Leu Glu Val Ile Tyr Met Ile Glu Pro Ile Asp Glu Tyr
515 520 525
Cys Val Gln Gln Leu Lys Glu Phe Glu Gly Lys Thr Leu Val Ser Val
530 535 540
Thr Lys Glu Gly Leu Glu Leu Pro Glu Asp Glu Glu Lys Lys Lys
545 550 555 560
Gln Glu Glu Lys Lys Thr Lys Phe Glu Asn Leu Cys Lys Ile Met Lys
565 570 575
Asp Ile Leu Glu Lys Lys Val Glu Lys Val Val Val Ser Asn Arg Leu
580 585 590
Val Thr Ser Pro Cys Cys Ile Val Thr Ser Thr Tyr Gly Trp Thr Ala
595 600 605
Asn Met Glu Arg Ile Met Lys Ala Gln Ala Leu Arg Asp Asn Ser Thr
610 615 620
Met Gly Tyr Met Ala Ala Lys Lys His Leu Glu Ile Asn Pro Asp His
625 630 635 640
Ser Ile Ile Glu Thr Leu Arg Gln Lys Ala Glu Ala Asp Lys Asn Asp
645 650 655
Lys Ser Val Lys Asp Leu Val Ile Leu Leu Tyr Glu Thr Ala Leu Leu
660 665 670
Ser Ser Gly Phe Ser Leu Glu Asp Pro Gln Thr His Ala Asn Arg Ile
675 680 685
Tyr Arg Met Ile Lys Leu Gly Leu Gly Ile Asp Glu Asp Asp Pro Thr
690 695 700
Ala Asp Asp Thr Ser Ala Ala Val Thr Glu Glu Met Pro Pro Leu Glu
705 710 715 720
Gly Asp Asp Asp Thr Ser Arg Met Glu Glu Val Asp
725 730

<210> 108
<211> 1361
<212> PRT
<213> Homo sapiens

<400> 108
Met Gly Ala Ala Gly Arg Gln Asp Phe Leu Phe Lys Ala Met Leu Thr
1 5 10 15
Ile Ser Trp Leu Thr Leu Thr Cys Phe Pro Gly Ala Thr Ser Thr Val
20 25 30
Ala Ala Gly Cys Pro Asp Gln Ser Pro Glu Leu Gln Pro Trp Asn Pro
35 40 45
Gly His Asp Gln Asp His His Val His Ile Gly Gln Gly Lys Thr Leu
50 55 60
Leu Leu Thr Ser Ser Ala Thr Val Tyr Ser Ile His Ile Ser Glu Gly
65 70 75 80
Gly Lys Leu Val Ile Lys Asp His Asp Glu Pro Ile Val Leu Arg Thr
85 90 95
Arg His Ile Leu Ile Asp Asn Gly Gly Glu Leu His Ala Gly Ser Ala
100 105 110
Leu Cys Pro Phe Gln Gly Asn Phe Thr Ile Ile Leu Tyr Gly Arg Ala
115 120 125
Asp Glu Gly Ile Gln Pro Asp Pro Tyr Tyr Gly Leu Lys Tyr Ile Gly
130 135 140
Val Gly Lys Gly Gly Ala Leu Glu Leu His Gly Gln Lys Lys Leu Ser
145 150 155 160
Trp Thr Phe Leu Asn Lys Thr Leu His Pro Gly Gly Met Ala Glu Gly
165 170 175
Gly Tyr Phe Phe Glu Arg Ser Trp Gly His Arg Gly Val Ile Val His
180 185 190
Val Ile Asp Pro Lys Ser Gly Thr Val Ile His Ser Asp Arg Phe Asp
195 200 205
Thr Tyr Arg Ser Lys Lys Glu Ser Glu Arg Leu Val Gln Tyr Leu Asn

Sequence listing.txt

210	Ala Val Pro Asp Gly	215	Arg Ile Leu Ser Val	220	Ala Val Asn Asp Glu Gly
225	Ser Arg Asn Leu Asp	230	Met Ala Arg Lys	235	Ala Met Thr Lys Leu Gly
	245		250		255
Ser Lys His Phe	Leu His Leu Gly	Phe Arg His Pro Trp	Ser Phe Leu		
	260		270		
Thr Val Lys Gly	Asn Pro Ser Ser	Ser Val Glu Asp His	Ile Glu Tyr		
	275		285		
His Gly His Arg Gly	Ser Ala Ala Ala	Arg Val Phe Lys	Leu Phe Gln		
	290		300		
Thr Glu His Gly Glu	Tyr Phe Asn Val Ser	Leu Ser Ser Glu	Trp Val		
	310		320		
Gln Asp Val Glu Trp	Thr Glu Trp Phe	Asp His Asp Lys	Val Ser Gln		
	325		335		
Thr Lys Gly Gly Glu	Lys Ile Ser Asp	Leu Trp Lys Ala	His Pro Gly		
	340		350		
Lys Ile Cys Asn Arg	Pro Ile Asp Ile	Gln Ala Thr Thr	Met Asp Gly		
	355		365		
Val Asn Leu Ser Thr	Glu Val Val Tyr	Lys Lys Gly Gln	Asp Tyr Arg		
	370		380		
Phe Ala Cys Tyr Asp	Arg Gly Arg Ala	Cys Arg Ser Tyr	Arg Val Arg		
	385		400		
Phe Leu Cys Gly Lys	Pro Val Arg Pro	Lys Leu Thr Val	Thr Ile Asp		
	405		415		
Thr Asn Val Asn Ser	Thr Ile Leu Asn	Leu Glu Asp Asn	Val Gln Ser		
	420		430		
Trp Lys Pro Gly Asp	Thr Leu Val Ile	Ala Ser Thr Asp	Tyr Ser Met		
	435		445		
Tyr Gln Ala Glu Glu	Phe Gln Val Leu	Pro Cys Arg Ser	Cys Ala Pro		
	450		460		
Asn Gln Val Lys Val	Ala Gly Lys Pro	Met Tyr Leu His	Ile Gly Glu		
	465		480		
Glu Ile Asp Gly Val	Asp Met Arg Ala	Glu Val Gly Leu	Leu Ser Arg		
	485		495		
Asn Ile Ile Val Met	Gly Glu Met Glu	Asp Lys Cys Tyr	Pro Tyr Arg		
	500		510		
Asn His Ile Cys Asn	Phe Phe Asp Phe	Asp Thr Phe Gly	Gly His Ile		
	515		525		
Lys Phe Ala Leu Gly	Phe Lys Ala Ala	His Leu Glu Gly	Thr Glu Leu		
	530		540		
Lys His Met Gly Gln	Gln Leu Val Gly	Gln Tyr Pro Ile	His Phe His		
	545		560		
Leu Ala Gly Asp Val	Asp Glu Arg Gly	Gly Tyr Asp Pro	Pro Thr Tyr		
	565		575		
Ile Arg Asp Leu Ser	Ile His His Thr	Phe Ser Arg Cys	Val Thr Val		
	580		590		
His Gly Ser Asn Gly	Leu Leu Ile Lys	Asp Val Val Gly	Tyr Asn Ser		
	595		605		
Leu Gly His Cys Phe	Phe Thr Glu Asp	Gly Pro Glu Glu	Arg Asn Thr		
	610		620		
Phe Asp His Cys Leu	Gly Leu Leu Val	Lys Ser Gly Thr	Leu Leu Pro		
	625		640		
Ser Asp Arg Asp Ser	Lys Met Cys Lys	Met Ile Thr Glu	Asp Ser Tyr		
	645		655		
Pro Gly Tyr Ile Pro	Lys Pro Arg Gln	Asp Cys Asn Ala	Val Ser Thr		
	660		670		
Phe Trp Met Ala Asn	Pro Asn Asn Leu	Ile Asn Cys Ala	Ala Ala Ala		
	675		685		
Gly Ser Glu Glu Thr	Gly Phe Trp Phe	Ile Phe His His	Val Pro Thr		
	690		700		
Gly Pro Ser Val Gly	Met Tyr Ser Pro	Gly Tyr Ser Glu	His Ile Pro		
	705		720		
	710		715		

Sequence listing.txt

Leu Gly Lys Phe Tyr Asn Asn Arg Ala His Ser Asn Tyr Arg Ala Gly
 725 730 735
 Met Ile Ile Asp Asn Gly Val Lys Thr Thr Glu Ala Ser Ala Lys Asp
 740 745 750
 Lys Arg Pro Phe Leu Ser Ile Ile Ser Ala Arg Tyr Ser Pro His Gln
 755 760 765
 Asp Ala Asp Pro Leu Lys Pro Arg Glu Pro Ala Ile Ile Arg His Phe
 770 775 780
 Ile Ala Tyr Lys Asn Gln Asp His Gly Ala Trp Leu Arg Gly Gly Asp
 785 790 795 800
 Val Trp Leu Asp Ser Cys Arg Phe Ala Asp Asn Gly Ile Gly Leu Thr
 805 810 815
 Leu Ala Ser Gly Gly Thr Phe Pro Tyr Asp Asp Gly Ser Lys Gln Glu
 820 825 830
 Ile Lys Asn Ser Leu Phe Val Gly Glu Ser Gly Asn Val Gly Thr Glu
 835 840 845
 Met Met Asp Asn Arg Ile Trp Gly Pro Gly Gly Leu Asp His Ser Gly
 850 855 860
 Arg Thr Leu Pro Ile Gly Gln Asn Phe Pro Ile Arg Gly Ile Gln Leu
 865 870 875 880
 Tyr Asp Gly Pro Ile Asn Ile Gln Asn Cys Thr Phe Arg Lys Phe Val
 885 890 895
 Ala Leu Glu Gly Arg His Thr Ser Ala Leu Ala Phe Arg Leu Asn Asn
 900 905 910
 Ala Trp Gln Ser Cys Pro His Asn Asn Val Thr Gly Ile Ala Phe Glu
 915 920 925
 Asp Val Pro Ile Thr Ser Arg Val Phe Phe Gly Glu Pro Gly Pro Trp
 930 935 940
 Phe Asn Gln Leu Asp Met Asp Gly Asp Lys Thr Ser Val Phe His Asp
 945 950 955 960
 Val Asp Gly Ser Val Ser Glu Tyr Pro Gly Ser Tyr Leu Thr Lys Asn
 965 970 975
 Asp Asn Trp Leu Val Arg His Pro Asp Cys Ile Asn Val Pro Asp Trp
 980 985 990
 Arg Gly Ala Ile Cys Ser Gly Cys Tyr Ala Gln Met Tyr Ile Gln Ala
 995 1000 1005
 Tyr Lys Thr Ser Asn Leu Arg Met Lys Ile Ile Lys Asn Asp Phe Pro
 1010 1015 1020
 Ser His Pro Leu Tyr Leu Glu Gly Ala Leu Thr Arg Ser Thr His Tyr
 1025 1030 1035 1040
 Gln Gln Tyr Gln Pro Val Val Thr Leu Gln Lys Gly Tyr Thr Ile His
 1045 1050 1055
 Trp Asp Gln Thr Ala Pro Ala Glu Leu Ala Ile Trp Leu Ile Asn Phe
 1060 1065 1070
 Asn Lys Gly Asp Trp Ile Arg Val Gly Leu Cys Tyr Pro Arg Gly Thr
 1075 1080 1085
 Thr Phe Ser Ile Leu Ser Asp Val His Asn Arg Leu Leu Lys Gln Thr
 1090 1095 1100
 Ser Lys Thr Gly Val Phe Val Arg Thr Leu Gln Met Asp Lys Val Glu
 1105 1110 1115 1120
 Gln Ser Tyr Pro Gly Arg Ser His Tyr Tyr Trp Asp Glu Asp Ser Gly
 1125 1130 1135
 Leu Leu Phe Leu Lys Leu Lys Ala Gln Asn Glu Arg Glu Lys Phe Ala
 1140 1145 1150
 Phe Cys Ser Met Lys Gly Cys Glu Arg Ile Lys Ile Lys Ala Leu Ile
 1155 1160 1165
 Pro Lys Asn Ala Gly Val Ser Asp Cys Thr Ala Thr Ala Tyr Pro Lys
 1170 1175 1180
 Phe Thr Glu Arg Ala Val Asp Val Pro Met Pro Lys Lys Leu Phe
 1185 1190 1195 1200
 Gly Ser Gln Leu Lys Thr Lys Asp His Phe Leu Glu Val Lys Met Glu
 1205 1210 1215
 Ser Ser Lys Gln His Phe Phe His Leu Trp Asn Asp Phe Ala Tyr Ile

Sequence listing.txt

```

1220      1225      1230
Glu Val Asp Gly Lys Lys Tyr Pro Ser Ser Glu Asp Gly Ile Gln Val
1235      1240      1245
Val Val Ile Asp Gly Asn Gln Gly Arg Val Val Ser His Thr Ser Phe
1250      1255      1260
Arg Asn Ser Ile Leu Gln Gly Ile Pro Trp Gln Leu Phe Asn Tyr Val
1265      1270      1275      1280
Ala Thr Ile Pro Asp Asn Ser Ile Val Leu Met Ala Ser Lys Gly Arg
1285      1290      1295
Tyr Val Ser Arg Gly Pro Trp Thr Arg Val Leu Glu Lys Leu Gly Ala
1300      1305      1310
Asp Arg Gly Leu Lys Leu Lys Glu Gln Met Ala Phe Val Gly Phe Lys
1315      1320      1325
Gly Ser Phe Arg Pro Ile Trp Val Thr Leu Asp Thr Glu Asp His Lys
1330      1335      1340
Ala Lys Ile Phe Gln Val Val Pro Ile Pro Val Val Lys Lys Lys Lys
1345      1350      1355      1360
Leu

```

<210> 109
 <211> 469
 <212> PRT
 <213> Homo sapiens

<400> 109

```

Met His Ser Phe Pro Leu Leu Leu Leu Leu Phe Trp Gly Val Val
1      5      10      15
Ser His Ser Phe Pro Ala Thr Leu Glu Thr Gln Glu Gln Asp Val Asp
20      25      30
Leu Val Gln Lys Tyr Leu Glu Lys Tyr Tyr Asn Leu Lys Asn Asp Gly
35      40      45
Arg Gln Val Glu Lys Arg Arg Asn Ser Gly Pro Val Val Glu Lys Leu
50      55      60
Lys Gln Met Gln Glu Phe Phe Gly Leu Lys Val Thr Gly Lys Pro Asp
65      70      75      80
Ala Glu Thr Leu Lys Val Met Lys Gln Pro Arg Cys Gly Val Pro Asp
85      90      95
Val Ala Gln Phe Val Leu Thr Glu Gly Asn Pro Arg Trp Glu Gln Thr
100      105      110
His Leu Thr Tyr Arg Ile Glu Asn Tyr Thr Pro Asp Leu Pro Arg Ala
115      120      125
Asp Val Asp His Ala Ile Glu Lys Ala Phe Gln Leu Trp Ser Asn Val
130      135      140
Thr Pro Leu Thr Phe Thr Lys Val Ser Glu Gly Gln Ala Asp Ile Met
145      150      155      160
Ile Ser Phe Val Arg Gly Asp His Arg Asp Asn Ser Pro Phe Asp Gly
165      170      175
Pro Gly Gly Asn Leu Ala His Ala Phe Gln Pro Gly Pro Gly Ile Gly
180      185      190
Gly Asp Ala His Phe Asp Glu Asp Glu Arg Trp Thr Asn Asn Phe Arg
195      200      205
Glu Tyr Asn Leu His Arg Val Ala Ala His Glu Leu Gly His Ser Leu
210      215      220
Gly Leu Ser His Ser Thr Asp Ile Gly Ala Leu Met Tyr Pro Ser Tyr
225      230      235      240
Thr Phe Ser Gly Asp Val Gln Leu Ala Gln Asp Asp Ile Asp Gly Ile
245      250      255
Gln Ala Ile Tyr Gly Arg Ser Gln Asn Pro Val Gln Pro Ile Gly Pro
260      265      270
Gln Thr Pro Lys Ala Cys Asp Ser Lys Leu Thr Phe Asp Ala Ile Thr
275      280      285

```

Sequence listing.txt

Thr Ile Arg Gly Glu Val Met Phe Phe Lys Asp Arg Phe Tyr Met Arg
 290 295 300
 Thr Asn Pro Phe Tyr Pro Glu Val Glu Leu Asn Phe Ile Ser Val Phe
 305 310 315 320
 Trp Pro Gln Leu Pro Asn Gly Leu Glu Ala Tyr Glu Phe Ala Asp
 325 330 335
 Arg Asp Glu Val Arg Phe Phe Lys Gly Asn Lys Tyr Trp Ala Val Gln
 340 345 350
 Gly Gln Asn Val Leu His Gly Tyr Pro Lys Asp Ile Tyr Ser Ser Phe
 355 360 365
 Gly Phe Pro Arg Thr Val Lys His Ile Asp Ala Ala Leu Ser Glu Glu
 370 375 380
 Asn Thr Gly Lys Thr Tyr Phe Phe Val Ala Asn Lys Tyr Trp Arg Tyr
 385 390 395 400
 Asp Glu Tyr Lys Arg Ser Met Asp Pro Gly Tyr Pro Lys Met Ile Ala
 405 410 415
 His Asp Phe Pro Gly Ile Gly His Lys Val Asp Ala Val Phe Met Lys
 420 425 430
 Asp Gly Phe Phe Tyr Phe Phe His Gly Thr Arg Gln Tyr Lys Phe Asp
 435 440 445
 Pro Lys Thr Lys Arg Ile Leu Thr Leu Gln Lys Ala Asn Ser Trp Phe
 450 455 460
 Asn Cys Arg Lys Asn
 465

<210> 110

<211> 267

<212> PRT

<213> Homo sapiens

<400> 110

Met Arg Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu
 1 5 10 15
 Ala Leu Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp
 20 25 30
 Glu Gln Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu
 35 40 45
 Thr Lys Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys
 50 55 60
 Phe Phe Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu
 65 70 75 80
 Ile Met Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser
 85 90 95
 Leu Phe Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg
 100 105 110
 Ile Val Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu
 115 120 125
 Val Ser Lys Ala Leu Asn Met Trp Gly Lys Glu Ile Pro Leu His Phe
 130 135 140
 Arg Lys Val Val Trp Gly Thr Ala Asp Ile Met Ile Gly Phe Ala Arg
 145 150 155 160
 Gly Ala His Gly Asp Ser Tyr Pro Phe Asp Gly Pro Gly Asn Thr Leu
 165 170 175
 Ala His Ala Phe Ala Pro Gly Thr Gly Leu Gly Gly Asp Ala His Phe
 180 185 190
 Asp Glu Asp Glu Arg Trp Thr Asp Gly Ser Ser Leu Gly Ile Asn Phe
 195 200 205
 Leu Tyr Ala Ala Thr His Glu Leu Gly His Ser Leu Gly Met Gly His
 210 215 220
 Ser Ser Asp Pro Asn Ala Val Met Tyr Pro Thr Tyr Gly Asn Gly Asp
 225 230 235 240
 Pro Gln Asn Phe Lys Leu Ser Gln Asp Asp Ile Lys Gly Ile Gln Lys

Sequence listing.txt

245
 Leu Tyr Gly Lys Arg Ser Asn Ser Arg Lys Lys
 260 250 255
 265

<210> 111
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 111
 Met Arg Pro Arg Ser Gly Pro Thr Arg Asn Pro Arg Leu Arg Ala Phe
 1 5 10 15
 Ala Gly Val Pro Thr Arg Gly Arg Thr Arg Gly Gln Ser Arg Arg Cys
 20 25 30
 Ala Ala Glu Ala Ser Ala Gly Pro Glu Arg Asp Ala Arg Pro Gly Ala
 35 40 45
 Pro Ala Ala Gly Thr Met Gly Ala Ala His Ser Ala Ser Glu Glu Val
 50 55 60
 Arg Glu Leu Glu Gly Lys Thr Gly Phe Ser Ser Asp Gln Ile Glu Gln
 65 70 75 80
 Leu His Arg Arg Phe Lys Gln Leu Ser Gly Asp Gln Pro Thr Ile Arg
 85 90 95
 Lys Glu Asn Phe Asn Asn Val Pro Asp Leu Glu Leu Asn Pro Ile Arg
 100 105 110
 Ser Lys Ile Val Arg Ala Phe Phe Asp Asn Arg Asn Leu Arg Lys Gly
 115 120 125
 Pro Ser Gly Leu Ala Asp Glu Ile Asn Phe Glu Asp Phe Leu Thr Ile
 130 135 140
 Met Ser Tyr Phe Arg Pro Ile Asp Thr Thr Met Asp Glu Glu Gln Val
 145 150 155 160
 Glu Leu Ser Arg Lys Glu Lys Leu Arg Phe Leu Phe His Met Tyr Asp
 165 170 175
 Ser Asp Ser Asp Gly Arg Ile Thr Leu Glu Glu Tyr Arg Asn Val Lys
 180 185 190
 Trp Ser Arg Ser Cys Cys Arg Glu Thr Leu Thr Ser Arg Arg Ser Pro
 195 200 205
 Leu Ala Pro Ser Pro Thr Gly Pro
 210 215

<210> 112
 <211> 422
 <212> PRT
 <213> Homo sapiens

<400> 112
 Met Asn Ser Gly His Ser Phe Ser Gln Thr Pro Ser Ala Ser Phe His
 1 5 10 15
 Gly Ala Gly Gly Gly Trp Gly Arg Pro Arg Ser Phe Pro Arg Ala Pro
 20 25 30
 Thr Val His Gly Gly Ala Gly Gly Ala Arg Ile Ser Leu Ser Phe Thr
 35 40 45
 Thr Arg Ser Cys Pro Pro Pro Gly Gly Ser Trp Gly Ser Gly Arg Ser
 50 55 60
 Ser Pro Leu Leu Gly Gly Asn Gly Lys Ala Thr Met Gln Asn Leu Asn
 65 70 75 80
 Asp Arg Leu Ala Ser Tyr Val Glu Lys Val Arg Ala Leu Glu Glu Ala
 85 90 95
 Asn Met Lys Leu Glu Ser Arg Ile Leu Lys Trp His Gln Gln Arg Asp
 100 105 110
 Pro Gly Ser Lys Lys Asp Tyr Ser Gln Tyr Glu Glu Asn Ile Thr His
 115 120 125

Sequence listing.txt

Leu Gln Glu Gln Ile Val Asp Gly Lys Met Thr Asn Ala Gln Ile Ile
 130 135 140
 Leu Leu Ile Asp Asn Ala Arg Met Ala Val Asp Asp Phe Asn Leu Lys
 145 150 155 160
 Tyr Glu Asn Glu His Ser Phe Lys Lys Asp Leu Glu Ile Glu Val Glu
 165 170 175
 Gly Leu Arg Arg Thr Leu Asp Asn Leu Thr Ile Val Thr Thr Asp Leu
 180 185 190
 Glu Gln Glu Val Glu Gly Met Arg Lys Glu Leu Ile Leu Met Lys Lys
 195 200 205
 His His Glu Gln Glu Met Glu Lys His His Val Pro Ser Asp Phe Asn
 210 215 220
 Val Asn Val Lys Val Asp Thr Gly Pro Arg Glu Asp Leu Ile Lys Val
 225 230 235 240
 Leu Glu Asp Met Arg Gln Glu Tyr Glu Leu Ile Ile Lys Lys Lys His
 245 250 255
 Arg Asp Leu Asp Thr Trp Tyr Lys Glu Gln Ser Ala Ala Met Ser Gln
 260 265 270
 Glu Ala Ala Ser Pro Ala Thr Val Gln Ser Arg Gln Gly Asp Ile His
 275 280 285
 Glu Leu Lys Arg Thr Phe Gln Ala Leu Glu Ile Asp Leu Gln Thr Gln
 290 295 300
 Tyr Ser Thr Lys Ser Ala Leu Glu Asn Met Leu Ser Glu Thr Gln Ser
 305 310 315 320
 Arg Tyr Ser Cys Lys Leu Gln Asp Met Gln Glu Ile Ile Ser His Tyr
 325 330 335
 Glu Glu Glu Leu Thr Gln Leu Arg His Glu Leu Glu Arg Gln Asn Asn
 340 345 350
 Glu Tyr Gln Val Leu Leu Gly Ile Lys Thr His Leu Glu Lys Glu Ile
 355 360 365
 Thr Thr Tyr Arg Arg Leu Leu Glu Gly Glu Ser Glu Gly Thr Arg Glu
 370 375 380
 Glu Ser Lys Ser Ser Met Lys Val Phe Ala Thr Pro Lys Ile Lys Ala
 385 390 395 400
 Ile Thr Gln Glu Thr Ile Asn Gly Arg Leu Val Leu Cys Gln Val Asn
 405 410 415
 Glu Ile Gln Lys His Ala
 420

<210> 113

<211> 398

<212> PRT

<213> Homo sapiens

<400> 113

Met Met Leu Lys Gly Ile Thr Arg Leu Ile Ser Arg Ile His Lys Leu
 1 5 10 15
 Asp Pro Gly Arg Phe Leu His Met Gly Thr Gln Ala Arg Gln Ser Ile
 20 25 30
 Ala Ala His Leu Asp Asn Gln Val Pro Val Glu Ser Pro Arg Ala Ile
 35 40 45
 Ser Arg Thr Asn Glu Asn Asp Pro Ala Lys His Gly Asp Gln His Glu
 50 55 60
 Gly Gln His Tyr Asn Ile Ser Pro Gln Asp Leu Glu Thr Val Phe Pro
 65 70 75 80
 His Gly Leu Pro Pro Arg Phe Val Met Gln Val Lys Thr Phe Ser Glu
 85 90 95
 Ala Cys Leu Met Val Arg Lys Pro Ala Leu Glu Leu Leu His Tyr Leu
 100 105 110
 Lys Asn Thr Ser Phe Ala Tyr Pro Ala Ile Arg Tyr Leu Leu Tyr Gly
 115 120 125
 Glu Lys Gly Thr Gly Lys Thr Leu Ser Leu Cys His Val Ile His Phe

Sequence listing.txt

```

      130      135      140
Cys Ala Lys Gln Asp Trp Leu Ile Leu His Ile Pro Asp Ala His Leu
145      150      155
Trp Val Lys Asn Cys Arg Asp Leu Leu Gln Ser Ser Tyr Asn Lys Gln
      165      170
Arg Phe Asp Gln Pro Leu Glu Ala Ser Thr Trp Leu Lys Asn Phe Lys
      180      185      190
Thr Thr Asn Glu Arg Phe Leu Asn Gln Ile Lys Val Gln Glu Lys Tyr
      195      200      205
Val Trp Asn Lys Arg Glu Ser Thr Glu Lys Gly Ser Pro Leu Gly Glu
      210      215      220
Val Val Glu Gln Gly Ile Thr Arg Val Arg Asn Ala Thr Asp Ala Val
225      230      235
Gly Ile Val Leu Lys Glu Leu Lys Arg Gln Ser Ser Leu Gly Met Phe
      245      250      255
His Leu Leu Val Ala Val Asp Gly Ile Asn Ala Leu Trp Gly Arg Thr
      260      265      270
Thr Leu Lys Arg Glu Asp Lys Ser Pro Ile Ala Pro Glu Glu Leu Ala
      275      280      285
Leu Val His Asn Leu Arg Lys Met Met Lys Asn Asp Trp His Gly Gly
      290      295      300
Ala Ile Val Ser Ala Leu Ser Gln Thr Gly Ser Leu Phe Lys Pro Arg
305      310      315
Lys Ala Tyr Leu Pro Gln Glu Leu Leu Gly Lys Glu Gly Phe Asp Ala
      325      330      335
Leu Asp Pro Phe Ile Pro Ile Leu Val Ser Asn Tyr Asn Pro Lys Glu
      340      345      350
Phe Glu Ser Cys Ile Gln Tyr Tyr Leu Glu Asn Asn Trp Leu Gln His
      355      360      365
Glu Lys Ala Pro Thr Glu Glu Gly Lys Lys Glu Leu Leu Phe Leu Ser
      370      375      380
Asn Ala Asn Pro Ser Leu Leu Glu Arg His Cys Ala Tyr Leu
385      390      395

```

<210> 114
 <211> 75
 <212> PRT
 <213> Homo sapiens

```

<400> 114
Met Leu Ser His Phe Arg Val Lys Val Lys Gly Phe Ile Leu Ile Ser
 1      5      10      15
Lys Tyr Phe Asp Pro Tyr Asp Leu Val Ser Ser Tyr Pro Lys Tyr Gly
      20      25      30
Pro His Thr Ser Arg Thr Gly Ile Leu Trp Glu Leu Val Arg Asn Val
      35      40      45
Glu Ser Leu Val Leu Arg Phe Ser Lys Ser Glu Ser Ala Phe Ser Ser
      50      55      60
Ala Leu Leu Ala Ile His Met Phe Glu Lys Asp
65      70      75

```

<210> 115
 <211> 163
 <212> PRT
 <213> Homo sapiens

```

<400> 115
Met Ser Glu Ser Gly Phe Lys Leu Leu Cys Gln Cys Leu Gly Phe Gly
 1      5      10      15
Ser Gly His Phe Arg Cys Asp Ser Ser Arg Trp Cys His Asp Asn Gly
      20      25      30

```

Sequence listing.txt

Val Asn Tyr Lys Ile Gly Glu Lys Trp Asp Arg Gln Gly Glu Asn Gly
 35 40 45
 Gln Met Met Ser Cys Thr Cys Leu Gly Asn Gly Lys Gly Glu Phe Lys
 50 55 60
 Cys Asp Pro His Glu Ala Thr Cys Tyr Asp Asp Gly Lys Thr Tyr His
 65 70 75 80
 Val Gly Glu Gln Trp Gln Lys Glu Tyr Leu Gly Ala Ile Cys Ser Cys
 85 90 95
 Thr Cys Phe Gly Gly Gln Arg Gly Trp Arg Cys Asp Asn Cys Arg Arg
 100 105 110
 Pro Gly Gly Glu Pro Ser Pro Glu Gly Thr Thr Gly Gln Ser Tyr Asn
 115 120 125
 Gln Tyr Ser Gln Arg Tyr His Gln Arg Thr Asn Thr Asn Val Asn Cys
 130 135 140
 Pro Ile Glu Cys Phe Met Pro Leu Asp Val Gln Ala Asp Arg Glu Asp
 145 150 155 160
 Ser Arg Glu

<210> 116
 <211> 483
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Ser Ile Arg Val Thr Gln Lys Ser Tyr Lys Val Ser Thr Ser Gly
 1 5 10 15
 Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Ser Gly Pro Gly Ser Arg
 20 25 30
 Ile Ser Ser Ser Ser Phe Ser Arg Val Gly Ser Ser Asn Phe Arg Gly
 35 40 45
 Gly Leu Gly Gly Gly Tyr Gly Gly Ala Ser Gly Met Gly Gly Ile Thr
 50 55 60
 Ala Val Thr Val Asn Gln Ser Leu Leu Ser Pro Leu Val Leu Glu Val
 65 70 75 80
 Asp Pro Asn Ile Gln Ala Val Arg Thr Gln Glu Lys Glu Gln Ile Lys
 85 90 95
 Thr Leu Asn Asn Lys Phe Ala Ser Phe Ile Asp Lys Val Arg Phe Leu
 100 105 110
 Glu Gln Gln Asn Lys Met Leu Glu Thr Lys Trp Ser Leu Leu Gln Gln
 115 120 125
 Gln Lys Thr Ala Arg Ser Asn Met Asp Asn Met Phe Glu Ser Tyr Ile
 130 135 140
 Asn Asn Leu Arg Arg Gln Leu Glu Thr Leu Gly Gln Glu Lys Leu Lys
 145 150 155 160
 Leu Glu Ala Glu Leu Gly Asn Met Gln Gly Leu Val Glu Asp Phe Lys
 165 170 175
 Asn Lys Tyr Glu Asp Glu Ile Asn Lys Arg Thr Glu Met Glu Asn Glu
 180 185 190
 Phe Val Leu Ile Lys Lys Asp Val Asp Glu Ala Tyr Met Asn Lys Val
 195 200 205
 Glu Leu Glu Ser Arg Leu Glu Gly Leu Thr Asp Glu Ile Asn Phe Leu
 210 215 220
 Arg Gln Leu Tyr Glu Glu Glu Ile Arg Glu Leu Gln Ser Gln Ile Ser
 225 230 235 240
 Asp Thr Ser Val Val Leu Ser Met Asp Asn Ser Arg Ser Leu Asp Met
 245 250 255
 Asp Ser Ile Ile Ala Glu Val Lys Ala Gln Tyr Glu Asp Ile Ala Asn
 260 265 270
 Arg Ser Arg Ala Glu Ala Glu Ser Met Tyr Gln Ile Lys Tyr Glu Glu
 275 280 285
 Leu Gln Ser Leu Ala Gly Lys His Gly Asp Asp Leu Arg Arg Thr Lys

Sequence listing.txt

```

      290      295      300
Thr Glu Ile Ser Glu Met Asn Arg Asn Ile Ser Arg Leu Gln Ala Glu
305      310      315      320
Ile Glu Gly Leu Lys Gly Gln Arg Ala Ser Leu Glu Ala Ala Ile Ala
      325      330      335
Asp Ala Glu Gln Arg Gly Glu Leu Ala Ile Lys Asp Ala Asn Ala Lys
      340      345      350
Leu Ser Glu Leu Glu Ala Ala Leu Gln Arg Ala Lys Gln Asp Met Ala
      355      360      365
Arg Gln Leu Arg Glu Tyr Gln Glu Leu Met Asn Val Lys Leu Ala Leu
      370      375      380
Asp Ile Glu Ile Ala Thr Tyr Arg Lys Leu Leu Glu Gly Glu Glu Ser
385      390      395      400
Arg Leu Glu Ser Gly Met Gln Asn Met Ser Ile His Thr Lys Thr Thr
      405      410      415
Ser Gly Tyr Ala Gly Gly Leu Ser Ser Ala Tyr Gly Gly Leu Thr Ser
      420      425      430
Pro Gly Leu Ser Tyr Ser Leu Gly Ser Ser Phe Gly Ser Gly Ala Gly
      435      440      445
Ser Ser Ser Phe Ser Arg Thr Ser Ser Ser Arg Ala Val Val Val Lys
      450      455      460
Lys Ile Glu Thr Arg Asp Gly Lys Leu Val Ser Glu Ser Ser Asp Val
465      470      475      480
Leu Pro Lys

```

```

<210> 117
<211> 430
<212> PRT
<213> Homo sapiens

```

```

<400> 117
Met Ser Phe Thr Thr Arg Ser Thr Phe Ser Thr Asn Tyr Arg Ser Leu
1      5      10      15
Gly Ser Val Gln Ala Pro Ser Tyr Gly Ala Arg Pro Val Ser Ser Ala
      20      25      30
Ala Ser Val Tyr Ala Gly Ala Gly Gly Ser Gly Ser Arg Ile Ser Val
      35      40      45
Ser Arg Ser Thr Ser Phe Arg Gly Gly Met Gly Ser Gly Gly Leu Ala
      50      55      60
Thr Gly Ile Ala Gly Gly Leu Ala Gly Met Gly Gly Ile Gln Asn Glu
65      70      75      80
Lys Glu Thr Met Gln Ser Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp
      85      90      95
Arg Val Arg Ser Leu Glu Thr Glu Asn Arg Arg Leu Glu Ser Lys Ile
      100      105      110
Arg Glu His Leu Glu Lys Lys Gly Pro Gln Val Arg Asp Trp Ser His
      115      120      125
Tyr Phe Lys Ile Ile Glu Asp Leu Arg Ala Gln Ile Phe Ala Asn Thr
      130      135      140
Val Asp Asn Ala Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu Ala
145      150      155      160
Ala Asp Asp Phe Arg Val Lys Tyr Glu Thr Glu Leu Ala Met Arg Gln
      165      170      175
Ser Val Glu Asn Asp Ile His Gly Leu Arg Lys Val Ile Asp Asp Thr
      180      185      190
Asn Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu
      195      200      205
Glu Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu
      210      215      220
Gln Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro
225      230      235      240

```

Sequence listing.txt

Lys Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr
 245 250 255
 Asp Glu Leu Ala Arg Lys Asn Arg Glu Glu Leu Asp Lys Tyr Trp Ser
 260 265 270
 Gln Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu
 275 280 285
 Val Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln
 290 295 300
 Ser Leu Glu Ile Asp Leu Asp Ser Met Arg Asn Leu Lys Ala Ser Leu
 305 310 315 320
 Glu Asn Ser Leu Arg Glu Val Glu Ala Arg Tyr Ala Leu Gln Met Glu
 325 330 335
 Gln Leu Asn Gly Ile Leu Leu His Leu Glu Ser Glu Leu Ala Gln Thr
 340 345 350
 Arg Ala Glu Gly Gln Arg Gln Ala Gln Glu Tyr Glu Ala Leu Leu Asn
 355 360 365
 Ile Lys Val Lys Leu Glu Ala Glu Ile Ala Thr Tyr Arg Arg Leu Leu
 370 375 380
 Glu Asp Gly Glu Asp Phe Asn Leu Gly Asp Ala Leu Asp Ser Ser Asn
 385 390 395 400
 Ser Met Gln Thr Ile Gln Lys Thr Thr Thr Arg Arg Ile Val Asp Gly
 405 410 415
 Lys Val Val Ser Glu Thr Asn Asp Thr Lys Val Leu Arg His
 420 425 430

<210> 118

<211> 400

<212> PRT

<213> Homo sapiens

<400> 118

Met Thr Ser Tyr Ser Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe Gly
 1 5 10 15
 Gly Leu Gly Gly Ser Val Arg Phe Gly Pro Gly Val Ala Phe Arg
 20 25 30
 Ala Pro Ser Ile His Gly Gly Ser Gly Gly Arg Gly Val Ser Val Ser
 35 40 45
 Ser Ala Arg Phe Val Ser Ser Ser Ser Ser Gly Ala Tyr Gly Gly Gly
 50 55 60
 Tyr Gly Gly Val Leu Thr Ala Ser Asp Gly Leu Ala Gly Asn Glu
 65 70 75 80
 Lys Leu Thr Met Gln Asn Leu Asn Asp Arg Leu Ala Ser Tyr Leu Asp
 85 90 95
 Lys Val Arg Ala Leu Glu Ala Ala Asn Gly Glu Leu Glu Val Lys Ile
 100 105 110
 Arg Asp Trp Tyr Gln Lys Gln Gly Pro Gly Pro Ser Arg Asp Tyr Ser
 115 120 125
 His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys Ile Leu Gly Ala
 130 135 140
 Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu
 145 150 155 160
 Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg
 165 170 175
 Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg Val Leu Asp Glu
 180 185 190
 Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile Glu Gly Leu Lys
 195 200 205
 Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu Glu Ile Ser Thr
 210 215 220
 Leu Arg Gly Gln Val Gly Gly Gln Val Ser Val Glu Val Asp Ser Ala
 225 230 235 240
 Pro Gly Thr Asp Leu Ala Lys Ile Leu Ser Asp Met Arg Ser Gln Tyr

Sequence listing.txt

245 250 255
 Glu Val Met Ala Glu Gln Asn Arg Lys Asp Ala Glu Ala Trp Phe Thr
 260 265 270
 Ser Arg Thr Glu Glu Leu Asn Arg Glu Val Ala Gly His Thr Glu Gln
 275 280 285
 Leu Gln Met Ser Arg Ser Glu Val Thr Asp Leu Arg Arg Thr Leu Gln
 290 295 300
 Gly Leu Glu Ile Glu Leu Gln Ser Gln Leu Ser Met Lys Ala Ala Leu
 305 310 315 320
 Glu Asp Thr Leu Ala Glu Thr Glu Ala Arg Phe Gly Ala Gln Leu Ala
 325 330 335
 His Ile Gln Ala Leu Ile Ser Gly Ile Glu Ala Gln Leu Gly Asp Val
 340 345 350
 Arg Ala Asp Ser Glu Arg Gln Asn Gln Glu Tyr Gln Arg Leu Met Asp
 355 360 365
 Ile Lys Ser Arg Leu Glu Gln Glu Ile Ala Thr Tyr Arg Ser Leu Leu
 370 375 380
 Glu Gly Gln Glu Asp His Tyr Asn Asn Leu Ser Ala Ser Lys Val Leu
 385 390 395 400

<210> 119

<211> 424

<212> PRT

<213> Homo sapiens

<400> 119

Met Asp Phe Ser Arg Arg Ser Phe His Arg Ser Leu Ser Ser Ser Leu
 1 5 10 15
 Gln Ala Pro Val Ser Thr Val Gly Met Gln Arg Leu Gly Thr Thr
 20 25 30
 Pro Ser Val Tyr Gly Gly Ala Gly Gly Arg Gly Ile Arg Ile Ser Asn
 35 40 45
 Ser Arg His Thr Val Asn Tyr Gly Ser Asp Leu Thr Gly Gly Gly Asp
 50 55 60
 Leu Phe Val Gly Asn Glu Lys Met Ala Met Gln Asn Leu Asn Asp Arg
 65 70 75 80
 Leu Ala Ser Tyr Leu Glu Lys Val Arg Thr Leu Glu Gln Ser Asn Ser
 85 90 95
 Lys Leu Glu Val Gln Ile Lys Gln Trp Tyr Glu Thr Asn Ala Pro Arg
 100 105 110
 Ala Gly Arg Asp Tyr Ser Ala Tyr Arg Gln Ile Glu Glu Leu Arg
 115 120 125
 Ser Gln Ile Lys Asp Ala Gln Leu Gln Asn Ala Arg Cys Val Leu Gln
 130 135 140
 Ile Asp Asn Ala Lys Leu Ala Ala Glu Asp Phe Arg Leu Lys Tyr Glu
 145 150 155 160
 Thr Glu Arg Gly Ile Arg Leu Thr Val Glu Ala Asp Leu Gln Gly Leu
 165 170 175
 Asn Lys Val Phe Asp Asp Leu Thr Leu His Lys Thr Asp Leu Glu Ile
 180 185 190
 Gln Ile Glu Leu Asn Lys Asp Leu Ala Leu Leu Lys Lys Glu His
 195 200 205
 Gln Glu Glu Val Asp Gly Leu His Lys His Leu Gly Asn Thr Val Asn
 210 215 220
 Val Glu Val Asp Ala Ala Pro Gly Leu Asn Leu Gly Val Ile Met Asn
 225 230 235 240
 Glu Met Arg Gln Lys Tyr Glu Val Met Ala Gln Lys Asn Leu Gln Glu
 245 250 255
 Ala Lys Glu Gln Phe Glu Arg Gln Thr Ala Val Leu Gln Gln Gln Val
 260 265 270
 Thr Val Asn Thr Glu Glu Leu Lys Gly Thr Glu Val Gln Leu Thr Glu
 275 280 285

Sequence listing.txt

Leu Arg Arg Thr Ser Gln Ser Leu Glu Ile Glu Leu Gln Ser His Leu
 290 295 300
 Ser Met Lys Glu Ser Leu Glu His Thr Leu Glu Glu Thr Lys Ala Arg
 305 310 315 320
 Tyr Ser Ser Gln Leu Ala Asn Leu Gln Ser Leu Leu Ser Ser Leu Glu
 325 330 335
 Ala Gln Leu Met Gln Ile Arg Ser Asn Met Glu Arg Gln Asn Asn Glu
 340 345 350
 Tyr His Ile Leu Leu Asp Ile Lys Thr Arg Leu Glu Gln Glu Ile Ala
 355 360 365
 Thr Tyr Arg Arg Leu Leu Glu Gly Glu Asp Val Lys Thr Thr Glu Tyr
 370 375 380
 Gln Leu Ser Thr Leu Glu Glu Arg Asp Ile Lys Lys Thr Arg Lys Ile
 385 390 395 400
 Lys Thr Val Val Gln Glu Val Val Asp Gly Lys Val Val Ser Ser Glu
 405 410 415
 Val Lys Glu Val Glu Glu Asn Ile
 420

<210> 120
 <211> 1255
 <212> PRT
 <213> Homo sapiens

<400> 120
 Met Thr Pro Gly Thr Gln Ser Pro Phe Phe Leu Leu Leu Leu Leu Thr
 1 5 10 15
 Val Leu Thr Val Thr Gly Ser Gly His Ala Ser Ser Thr Pro Gly
 20 25 30
 Gly Glu Lys Glu Thr Ser Ala Thr Gln Arg Ser Ser Val Pro Ser Ser
 35 40 45
 Thr Glu Lys Asn Ala Val Ser Met Thr Ser Ser Val Leu Ser Ser His
 50 55 60
 Ser Pro Gly Ser Gly Ser Thr Thr Gln Gly Gln Asp Val Thr Leu
 65 70 75 80
 Ala Pro Ala Thr Glu Pro Ala Ser Gly Ser Ala Ala Thr Trp Gly Gln
 85 90 95
 Asp Val Thr Ser Val Pro Val Thr Arg Pro Ala Leu Gly Ser Thr Thr
 100 105 110
 Pro Pro Ala His Asp Val Thr Ser Ala Pro Asp Asn Lys Pro Ala Pro
 115 120 125
 Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr
 130 135 140
 Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser
 145 150 155 160
 Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His
 165 170 175 180
 Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala
 185 190 195
 Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro
 200 205 210
 Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr
 215 220 225
 Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser
 230 235 240
 Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His
 245 250 255
 Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala
 260 265 270
 Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro
 275 280 285
 Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr

Sequence listing.txt

	290					295					300				
Arg 305	Pro	Ala	Pro	Gly	Ser 310	Thr	Ala	Pro	Pro	Ala 315	His	Gly	Val	Thr	Ser 320
Ala	Pro	Asp	Thr	Arg 325	Pro	Ala	Pro	Gly	Ser 330	Thr	Ala	Pro	Pro	Ala 335	His
Gly	Val	Thr	Ser 340	Ala	Pro	Asp	Thr	Arg 345	Pro	Ala	Pro	Gly	Ser 350	Thr	Ala
Pro	Pro	Ala 355	His	Gly	Val	Thr	Ser 360	Ala	Pro	Asp	Thr	Arg 365	Pro	Ala	Pro
Gly	Ser 370	Thr	Ala	Pro	Pro	Ala 375	His	Gly	Val	Thr	Ser 380	Ala	Pro	Asp	Thr
Arg 385	Pro	Ala	Pro	Gly	Ser 390	Thr	Ala	Pro	Pro	Ala 395	His	Gly	Val	Thr	Ser 400
Ala	Pro	Asp	Thr	Arg 405	Pro	Ala	Pro	Gly	Ser 410	Thr	Ala	Pro	Pro	Ala 415	His
Gly	Val	Thr	Ser 420	Ala	Pro	Asp	Thr	Arg 425	Pro	Ala	Pro	Gly	Ser 430	Thr	Ala
Pro	Pro	Ala 435	His	Gly	Val	Thr	Ser 440	Ala	Pro	Asp	Thr	Arg 445	Pro	Ala	Pro
Gly	Ser 450	Thr	Ala	Pro	Pro	Ala 455	His	Gly	Val	Thr	Ser 460	Ala	Pro	Asp	Thr
Arg 465	Pro	Ala	Pro	Gly	Ser 470	Thr	Ala	Pro	Pro	Ala 475	His	Gly	Val	Thr	Ser 480
Ala	Pro	Asp	Thr	Arg 485	Pro	Ala	Pro	Gly	Ser 490	Thr	Ala	Pro	Pro	Ala 495	His
Gly	Val	Thr	Ser 500	Ala	Pro	Asp	Thr	Arg 505	Pro	Ala	Pro	Gly	Ser 510	Thr	Ala
Pro	Pro	Ala 515	His	Gly	Val	Thr	Ser 520	Ala	Pro	Asp	Thr	Arg 525	Pro	Ala	Pro
Gly	Ser 530	Thr	Ala	Pro	Pro	Ala 535	His	Gly	Val	Thr	Ser 540	Ala	Pro	Asp	Thr
Arg 545	Pro	Ala	Pro	Gly	Ser 550	Thr	Ala	Pro	Pro	Ala 555	His	Gly	Val	Thr	Ser 560
Ala	Pro	Asp	Thr	Arg 565	Pro	Ala	Pro	Gly	Ser 570	Thr	Ala	Pro	Pro	Ala 575	His
Gly	Val	Thr	Ser 580	Ala	Pro	Asp	Thr	Arg 585	Pro	Ala	Pro	Gly	Ser 590	Thr	Ala
Pro	Pro	Ala 595	His	Gly	Val	Thr	Ser 600	Ala	Pro	Asp	Thr	Arg 605	Pro	Ala	Pro
Gly	Ser 610	Thr	Ala	Pro	Pro	Ala 615	His	Gly	Val	Thr	Ser 620	Ala	Pro	Asp	Thr
Arg 625	Pro	Ala	Pro	Gly	Ser 630	Thr	Ala	Pro	Pro	Ala 635	His	Gly	Val	Thr	Ser 640
Ala	Pro	Asp	Thr	Arg 645	Pro	Ala	Pro	Gly	Ser 650	Thr	Ala	Pro	Pro	Ala 655	His
Gly	Val	Thr	Ser 660	Ala	Pro	Asp	Thr	Arg 665	Pro	Ala	Pro	Gly	Ser 670	Thr	Ala
Pro	Pro	Ala 675	His	Gly	Val	Thr	Ser 680	Ala	Pro	Asp	Thr	Arg 685	Pro	Ala	Pro
Gly	Ser 690	Thr	Ala	Pro	Pro	Ala 695	His	Gly	Val	Thr	Ser 700	Ala	Pro	Asp	Thr
Arg 705	Pro	Ala	Pro	Gly	Ser 710	Thr	Ala	Pro	Pro	Ala 715	His	Gly	Val	Thr	Ser 720
Ala	Pro	Asp	Thr	Arg 725	Pro	Ala	Pro	Gly	Ser 730	Thr	Ala	Pro	Pro	Ala 735	His
Gly	Val	Thr	Ser 740	Ala	Pro	Asp	Thr	Arg 745	Pro	Ala	Pro	Gly	Ser 750	Thr	Ala
Pro	Pro	Ala 755	His	Gly	Val	Thr	Ser 760	Ala	Pro	Asp	Thr	Arg 765	Pro	Ala	Pro
Gly	Ser 770	Thr	Ala	Pro	Pro	Ala 775	His	Gly	Val	Thr	Ser 780	Ala	Pro	Asp	Thr
Arg 785	Pro	Ala	Pro	Gly	Ser 790	Thr	Ala	Pro	Pro	Ala 795	His	Gly	Val	Thr	Ser 800

Sequence listing.txt

Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His
805 810 815
Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala
820 825 830
Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro
835 840 845
Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr
850 855 860
Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser
865 870 875 880
Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala Pro Pro Ala His
885 890 895
Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro Gly Ser Thr Ala
900 905 910
Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Thr Arg Pro Ala Pro
915 920 925
Gly Ser Thr Ala Pro Pro Ala His Gly Val Thr Ser Ala Pro Asp Asn
930 935 940
Arg Pro Ala Leu Gly Ser Thr Ala Pro Pro Val His Asn Val Thr Ser
945 950 955 960
Ala Ser Gly Ser Ala Ser Gly Ser Ala Ser Thr Leu Val His Asn Gly
965 970 975
Thr Ser Ala Arg Ala Thr Thr Thr Pro Ala Ser Lys Ser Thr Pro Phe
980 985 990
Ser Ile Pro Ser His His Ser Asp Thr Pro Thr Thr Leu Ala Ser His
995 1000 1005
Ser Thr Lys Thr Asp Ala Ser Ser Thr His His Ser Ser Val Pro Pro
1010 1015 1020
Leu Thr Ser Ser Asn His Ser Thr Ser Pro Gln Leu Ser Thr Gly Val
1025 1030 1035 1040
Ser Phe Phe Phe Leu Ser Phe His Ile Ser Asn Leu Gln Phe Asn Ser
1045 1050 1055
Ser Leu Glu Asp Pro Ser Thr Asp Tyr Tyr Gln Glu Leu Gln Arg Asp
1060 1065 1070
Ile Ser Glu Met Phe Leu Gln Ile Tyr Lys Gln Gly Gly Phe Leu Gly
1075 1080 1085
Leu Ser Asn Ile Lys Phe Arg Pro Gly Ser Val Val Val Gln Leu Thr
1090 1095 1100
Leu Ala Phe Arg Glu Gly Thr Ile Asn Val His Asp Val Glu Thr Gln
1105 1110 1115 1120
Phe Asn Gln Tyr Lys Thr Glu Ala Ala Ser Arg Tyr Asn Leu Thr Ile
1125 1130 1135
Ser Asp Val Ser Val Ser Asp Val Pro Phe Pro Phe Ser Ala Gln Ser
1140 1145 1150
Gly Ala Gly Val Pro Gly Trp Gly Ile Ala Leu Leu Val Leu Val Cys
1155 1160 1165
Val Leu Val Ala Leu Ala Ile Val Tyr Leu Ile Ala Leu Ala Val Cys
1170 1175 1180
Gln Cys Arg Arg Lys Asn Tyr Gly Gln Leu Asp Ile Phe Pro Ala Arg
1185 1190 1195 1200
Asp Thr Tyr His Pro Met Ser Glu Tyr Pro Thr Tyr His Thr His Gly
1205 1210 1215
Arg Tyr Val Pro Pro Ser Ser Thr Asp Arg Ser Pro Tyr Glu Lys Val
1220 1225 1230
Ser Ala Gly Asn Gly Gly Ser Ser Leu Ser Tyr Thr Asn Pro Ala Val
1235 1240 1245
Ala Ala Ala Ser Ala Asn Leu
1250 1255

<210> 121
<211> 5179
<212> PRT

Sequence listing.txt

<213> Homo sapiens

<400> 121

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Met Gly Leu Pro Leu Ala Arg Leu Ala Ala Val Cys Leu Ala Leu Ser
 1      5      10      15
Leu Ala Gly Gly Ser Glu Leu Gln Thr Glu Gly Arg Thr Arg Tyr His
 20      25      30
Gly Arg Asn Val Cys Ser Thr Trp Gly Asn Phe His Tyr Lys Thr Phe
 35      40      45
Asp Gly Asp Val Phe Arg Phe Pro Gly Leu Cys Asp Tyr Asn Phe Ala
 50      55      60
Ser Asp Cys Arg Gly Ser Tyr Lys Glu Phe Ala Val His Leu Lys Arg
 65      70      75      80
Gly Pro Gly Gln Ala Glu Ala Pro Ala Gly Val Glu Ser Ile Leu Leu
 85      90      95
Thr Ile Lys Asp Asp Thr Ile Tyr Leu Thr Arg His Leu Ala Val Leu
100      105      110
Asn Gly Ala Val Val Ser Thr Pro His Tyr Ser Pro Gly Leu Leu Ile
115      120      125
Glu Lys Ser Asp Ala Tyr Thr Lys Val Tyr Ser Arg Ala Gly Leu Thr
130      135      140
Leu Met Trp Asn Arg Glu Asp Ala Leu Met Leu Glu Leu Asp Thr Lys
145      150      155      160
Phe Arg Asn His Thr Cys Gly Leu Cys Gly Asp Tyr Asn Gly Leu Gln
165      170      175
Ser Tyr Ser Glu Phe Leu Ser Asp Gly Val Leu Phe Ser Pro Leu Glu
180      185      190
Phe Gly Asn Met Gln Lys Ile Asn Gln Pro Asp Val Val Cys Glu Asp
195      200      205
Pro Glu Glu Glu Val Ala Pro Ala Ser Cys Ser Glu His Arg Ala Glu
210      215      220
Cys Glu Arg Leu Leu Thr Ala Glu Ala Phe Ala Asp Cys Gln Asp Leu
225      230      235      240
Val Pro Leu Glu Pro Tyr Leu Arg Ala Cys Gln Gln Asp Arg Cys Arg
245      250      255
Cys Pro Gly Gly Asp Thr Cys Val Cys Ser Thr Val Ala Glu Phe Ser
260      265      270
Arg Gln Cys Ser His Ala Gly Gly Arg Pro Gly Asn Trp Arg Thr Ala
275      280      285
Thr Leu Cys Pro Lys Thr Cys Pro Gly Asn Leu Val Tyr Leu Glu Ser
290      295      300
Gly Ser Pro Cys Met Asp Thr Cys Ser His Leu Glu Val Ser Ser Leu
305      310      315      320
Cys Glu Glu His Arg Met Asp Gly Cys Phe Cys Pro Glu Gly Thr Val
325      330      335
Tyr Asp Asp Ile Gly Asp Ser Gly Cys Val Pro Val Ser Gln Cys His
340      345      350
Cys Arg Leu His Gly His Leu Tyr Thr Pro Gly Gln Glu Ile Thr Asn
355      360      365
Asp Cys Glu Gln Cys Val Cys Asn Ala Gly Arg Trp Val Cys Lys Asp
370      375      380
Leu Pro Cys Pro Gly Thr Cys Ala Leu Glu Gly Ser His Ile Thr
385      390      395      400
Thr Phe Asp Gly Lys Thr Tyr Thr Phe His Gly Asp Cys Tyr Tyr Val
405      410      415
Leu Ala Lys Gly Asp His Asn Asp Ser Tyr Ala Leu Leu Gly Glu Leu
420      425      430
Ala Pro Cys Gly Ser Thr Asp Lys Gln Thr Cys Leu Lys Thr Val Val
435      440      445
Leu Leu Ala Asp Lys Lys Lys Asn Ala Val Val Phe Lys Ser Asp Gly
450      455      460
Ser Val Leu Leu Asn Gln Leu Gln Val Asn Leu Pro His Val Thr Ala
465      470      475      480

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Sequence listing.txt

Ser Phe Ser Val Phe Arg Pro Ser Ser Tyr His Ile Met Val Ser Met
 Ala Ile Gly Val Arg Leu Gln Val Gln Leu Ala Pro Val Met Gln Leu
 Phe Val Thr Leu Asp Gln Ala Ser Gln Gly Gln Val Gln Gly Leu Cys
 Gly Asn Phe Asn Gly Leu Glu Gly Asp Asp Phe Lys Thr Ala Ser Gly
 Leu Val Glu Ala Thr Gly Ala Gly Phe Ala Asn Thr Trp Lys Ala Gln
 Ser Thr Cys His Asp Lys Leu Asp Trp Leu Asp Asp Pro Cys Ser Leu
 Asn Ile Glu Ser Ala Asn Tyr Ala Glu His Trp Cys Ser Leu Leu Lys
 Lys Thr Glu Thr Pro Phe Gly Arg Cys His Ser Ala Val Asp Pro Ala
 Glu Tyr Tyr Lys Arg Cys Lys Tyr Asp Thr Cys Asn Cys Gln Asn Asn
 Glu Asp Cys Leu Cys Ala Ala Leu Ser Ser Tyr Ala Arg Ala Cys Thr
 Ala Lys Gly Val Met Leu Trp Gly Trp Arg Glu His Val Cys Asn Lys
 Asp Val Gly Ser Cys Pro Asn Ser Gln Val Phe Leu Tyr Asn Leu Thr
 Thr Cys Gln Gln Thr Cys Arg Ser Leu Ser Glu Ala Asp Ser His Cys
 Leu Glu Gly Phe Ala Pro Val Asp Gly Cys Gly Cys Pro Asp His Thr
 Phe Leu Asp Glu Lys Gly Arg Cys Val Pro Leu Ala Lys Cys Ser Cys
 Tyr His Arg Gly Leu Tyr Leu Glu Ala Gly Asp Val Val Val Arg Gln
 Glu Glu Arg Cys Val Cys Arg Asp Gly Arg Leu His Cys Arg Gln Ile
 Arg Leu Ile Gly Gln Ser Cys Thr Ala Pro Lys Ile His Met Asp Cys
 Ser Asn Leu Thr Ala Leu Ala Thr Ser Lys Pro Arg Ala Leu Ser Cys
 Gln Thr Leu Ala Ala Gly Tyr Tyr His Thr Glu Cys Val Ser Gly Cys
 Val Cys Pro Asp Gly Leu Met Asp Asp Gly Arg Gly Gly Cys Val Val
 Glu Lys Glu Cys Pro Cys Val His Asn Asn Asp Leu Tyr Ser Ser Gly
 Ala Lys Ile Lys Val Asp Cys Asn Thr Cys Thr Cys Lys Arg Gly Arg
 Trp Val Cys Thr Gln Ala Val Cys His Gly Thr Cys Ser Ile Tyr Gly
 Ser Gly His Tyr Ile Thr Phe Asp Gly Lys Tyr Tyr Asp Phe Asp Gly
 His Cys Ser Tyr Val Ala Val Gln Asp Tyr Cys Gly Gln Asn Ser Ser
 Leu Gly Ser Phe Ser Ile Ile Thr Glu Asn Val Pro Cys Gly Thr Thr
 Gly Val Thr Cys Ser Lys Ala Ile Lys Ile Phe Met Gly Arg Thr Glu
 Leu Lys Leu Glu Asp Lys His Arg Val Val Ile Gln Arg Asp Glu Gly
 His His Val Ala Tyr Thr Arg Glu Val Gly Gln Tyr Leu Val Val
 Glu Ser Ser Thr Gly Ile Ile Val Ile Trp Asp Lys Arg Thr Thr Val
 Phe Ile Lys Leu Ala Pro Ser Tyr Lys Gly Thr Val Cys Gly Leu Cys

Sequence listing.txt

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      980      985      990
Gly Asn Phe Asp His Arg Ser Asn Asn Asp Phe Thr Thr Arg Asp His
      995      1000      1005
Met Val Val Ser Ser Glu Leu Asp Phe Gly Asn Ser Trp Lys Glu Ala
      1010      1015      1020
Pro Thr Cys Pro Asp Val Ser Thr Asn Pro Glu Pro Cys Ser Leu Asn
1025      1030      1035      1040
Pro His Arg Arg Ser Trp Ala Glu Lys Gln Cys Ser Ile Leu Lys Ser
      1045      1050      1055
Ser Val Phe Ser Ile Cys His Ser Lys Val Asp Pro Lys Pro Phe Tyr
      1060      1065      1070
Glu Ala Cys Val His Asp Ser Cys Ser Cys Asp Thr Gly Gly Asp Cys
      1075      1080      1085
Glu Cys Phe Cys Ser Ala Val Ala Ser Tyr Ala Gln Glu Cys Thr Lys
      1090      1095      1100
Glu Gly Ala Cys Val Phe Trp Arg Thr Pro Asp Leu Cys Pro Ile Phe
1105      1110      1115      1120
Cys Asp Tyr Tyr Asn Pro Pro His Glu Cys Glu Trp His Tyr Glu Pro
      1125      1130      1135
Cys Gly Asn Arg Ser Phe Glu Thr Cys Arg Thr Ile Asn Gly Ile His
      1140      1145      1150
Ser Asn Ile Ser Val Ser Tyr Leu Glu Gly Cys Tyr Pro Arg Cys Pro
      1155      1160      1165
Lys Asp Arg Pro Ile Tyr Glu Glu Asp Leu Lys Lys Cys Val Thr Ala
      1170      1175      1180
Asp Lys Cys Gly Cys Tyr Val Glu Asp Thr His Tyr Pro Pro Gly Ala
1185      1190      1195      1200
Ser Val Pro Thr Glu Glu Thr Cys Lys Ser Cys Val Cys Thr Asn Ser
      1205      1210      1215
Ser Gln Val Val Cys Arg Pro Glu Glu Gly Lys Ile Leu Asn Gln Thr
      1220      1225      1230
Gln Asp Gly Ala Phe Cys Tyr Trp Glu Ile Cys Gly Pro Asn Gly Thr
      1235      1240      1245
Val Glu Lys His Phe Asn Ile Cys Ser Ile Thr Thr Arg Pro Ser Thr
      1250      1255      1260
Leu Thr Thr Phe Thr Thr Ile Thr Leu Pro Thr Thr Pro Thr Ser Phe
1265      1270      1275      1280
Thr Thr Thr Thr Thr Thr Thr Thr Pro Thr Ser Ser Thr Val Leu Ser
      1285      1290      1295
Thr Thr Pro Lys Leu Cys Cys Leu Trp Ser Asp Trp Ile Asn Glu Asp
      1300      1305      1310
His Pro Ser Ser Gly Ser Asp Asp Gly Asp Arg Glu Pro Phe Asp Gly
      1315      1320      1325
Val Cys Gly Ala Pro Glu Asp Ile Glu Cys Arg Ser Val Lys Asp Pro
      1330      1335      1340
His Leu Ser Leu Glu Gln His Gly Gln Lys Val Gln Cys Asp Val Ser
1345      1350      1355      1360
Val Gly Phe Ile Cys Lys Asn Glu Asp Gln Phe Gly Asn Gly Pro Phe
      1365      1370      1375
Gly Leu Cys Tyr Asp Tyr Lys Ile Arg Val Asn Cys Cys Trp Pro Met
      1380      1385      1390
Asp Lys Cys Ile Thr Thr Pro Ser Pro Pro Thr Thr Thr Pro Ser Pro
      1395      1400      1405
Pro Pro Thr Thr Thr Thr Thr Leu Pro Pro Thr Thr Thr Pro Ser Pro
      1410      1415      1420
Pro Thr Thr Thr Thr Thr Thr Pro Pro Pro Thr Thr Thr Pro Ser Pro
1425      1430      1435      1440
Pro Ile Thr Thr Thr Thr Thr Pro Leu Pro Thr Thr Thr Pro Ser Pro
      1445      1450      1455
Pro Ile Ser Thr Thr Thr Thr Pro Pro Pro Thr Thr Thr Pro Ser Pro
      1460      1465      1470
Pro Thr Thr Thr Pro Ser Pro Pro Thr Thr Thr Pro Ser Pro Pro Thr
      1475      1480      1485

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Sequence listing.txt

Thr Thr Thr Thr Thr Pro Pro Pro Thr Thr Thr Pro Ser Pro Pro Met
 1490 1495 1500
 Thr Thr Pro Ile Thr Pro Pro Ala Ser Thr Thr Thr Leu Pro Pro Thr
 1505 1510 1515 1520
 Thr Thr Pro Ser Pro Pro Thr Thr Thr Thr Thr Pro Pro Pro Thr
 1525 1530 1535
 Thr Thr Pro Ser Pro Pro Thr Thr Thr Pro Ile Thr Pro Pro Thr Ser
 1540 1545 1550
 Thr Thr Thr Leu Pro Pro Thr Thr Thr Pro Ser Pro Pro Pro Thr Thr
 1555 1560 1565
 Thr Thr Thr Pro Pro Pro Thr Thr Thr Pro Ser Pro Pro Thr Thr Thr
 1570 1575 1580
 Thr Pro Ser Pro Pro Thr Ile Thr Thr Thr Thr Pro Pro Pro Thr Thr
 1585 1590 1595 1600
 Thr Pro Ser Pro Pro Thr Thr Thr Thr Thr Thr Pro Pro Pro Thr Thr
 1605 1610 1615
 Thr Pro Ser Pro Pro Thr Thr Thr Pro Ile Thr Pro Pro Thr Ser Thr
 1620 1625 1630
 Thr Thr Leu Pro Pro Thr Thr Thr Pro Ser Pro Pro Pro Thr Thr Thr
 1635 1640 1645
 Thr Thr Pro Pro Pro Thr Thr Thr Pro Ser Pro Pro Thr Thr Thr Thr
 1650 1655 1660
 Pro Ser Pro Pro Ile Thr Thr Thr Thr Thr Pro Pro Pro Thr Thr Thr
 1665 1670 1675 1680
 Pro Ser Ser Pro Ile Thr Thr Thr Pro Ser Pro Pro Thr Thr Thr Met
 1685 1690 1695
 Thr Thr Pro Ser Pro Thr Thr Thr Pro Ser Ser Pro Ile Thr Thr Thr
 1700 1705 1710
 Thr Thr Pro Ser Ser Thr Thr Thr Pro Ser Pro Pro Pro Thr Thr Met
 1715 1720 1725
 Thr Thr Pro Ser Pro Thr Thr Thr Pro Ser Pro Pro Thr Thr Thr Met
 1730 1735 1740
 Thr Thr Leu Pro Pro Thr Thr Ser Ser Pro Leu Thr Thr Thr Pro
 1745 1750 1755 1760
 Leu Pro Pro Ser Ile Thr Pro Pro Thr Phe Ser Pro Phe Ser Thr Thr
 1765 1770 1775
 Thr Pro Thr Thr Pro Cys Val Pro Leu Cys Asn Trp Thr Gly Trp Leu
 1780 1785 1790
 Asp Ser Gly Lys Pro Asn Phe His Lys Pro Gly Gly Asp Thr Glu Leu
 1795 1800 1805
 Ile Gly Asp Val Cys Gly Pro Gly Trp Ala Ala Asn Ile Ser Cys Arg
 1810 1815 1820
 Ala Thr Met Tyr Pro Asp Val Pro Ile Gly Gln Leu Gly Gln Thr Val
 1825 1830 1835 1840
 Val Cys Asp Val Ser Val Gly Leu Ile Cys Lys Asn Glu Asp Gln Lys
 1845 1850 1855
 Pro Gly Gly Val Ile Pro Met Ala Phe Cys Leu Asn Tyr Glu Ile Asn
 1860 1865 1870
 Val Gln Cys Cys Glu Cys Val Thr Gln Pro Thr Thr Met Thr Thr Thr
 1875 1880 1885
 Thr Thr Glu Asn Pro Thr Pro Pro Thr Thr Thr Pro Ile Thr Thr Thr
 1890 1895 1900
 Thr Thr Val Thr Pro Thr Thr Pro Thr Gly Thr Gln Thr Pro Thr
 1905 1910 1915 1920
 Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
 1925 1930 1935
 Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr
 1940 1945 1950
 Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
 1955 1960 1965
 Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
 1970 1975 1980
 Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Val Thr

Sequence listing.txt

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1985          1990          1995          2000
Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile
2005          2010          2015
Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Gly Thr Gln
2020          2025          2030
Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Val Thr Pro Thr
2035          2040          2045
Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr
2050          2055          2060
Thr Thr Thr Val Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro
2065          2070          2075          2080
Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr
2085          2090          2095
Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
2100          2105          2110
Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr
2115          2120          2125
Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr
2130          2135          2140
Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val
2145          2150          2155          2160
Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro
2165          2170          2175
Ile Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr
2180          2185          2190
Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro
2195          2200          2205
Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
2210          2215          2220
Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr
2225          2230          2235          2240
Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro
2245          2250          2255
Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr
2260          2265          2270
Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr
2275          2280          2285
Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
2290          2295          2300
Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr
2305          2310          2315          2320
Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
2325          2330          2335
Pro Ile Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
2340          2345          2350
Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr
2355          2360          2365
Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile
2370          2375          2380
Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln
2385          2390          2395          2400
Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr
2405          2410          2415
Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr
2420          2425          2430
Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro
2435          2440          2445
Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr
2450          2455          2460
Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
2465          2470          2475          2480
Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr
2485          2490          2495

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Sequence listing.txt

Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr
 2500 2505 2510
 Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val
 2515 2520 2525
 Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro
 2530 2535 2540
 Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr
 2545 2550 2555 2560
 Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro
 2565 2570 2575
 Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
 2580 2585 2590
 Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr
 2595 2600 2605
 Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro
 2610 2615 2620
 Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr
 2625 2630 2635 2640
 Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr
 2645 2650 2655
 Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
 2660 2665 2670
 Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
 2675 2680 2685
 Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
 2690 2695 2700
 Pro Ile Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
 2705 2710 2715 2720
 Thr Gln Thr Pro Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr
 2725 2730 2735
 Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile
 2740 2745 2750
 Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln
 2755 2760 2765
 Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr
 2770 2775 2780
 Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr
 2785 2790 2795 2800
 Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro
 2805 2810 2815
 Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr
 2820 2825 2830
 Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
 2835 2840 2845
 Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr
 2850 2855 2860
 Thr Pro Ile Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr
 2865 2870 2875 2880
 Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val
 2885 2890 2895
 Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro
 2900 2905 2910
 Ile Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr
 2915 2920 2925
 Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro
 2930 2935 2940
 Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
 2945 2950 2955 2960
 Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr
 2965 2970 2975
 Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro
 2980 2985 2990
 Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr

Sequence listing.txt

2995 3000 3005
 Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr
 3010 3015 3020
 Thr Thr Pro Ile Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
 3025 3030 3035 3040
 Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
 3045 3050 3055
 Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
 3060 3065 3070
 Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
 3075 3080 3085
 Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr
 3090 3095 3100
 Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile
 3105 3110 3115 3120
 Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln
 3125 3130 3135
 Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr
 3140 3145 3150
 Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr
 3155 3160 3165
 Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro
 3170 3175 3180
 Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr
 3185 3190 3195 3200
 Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
 3205 3210 3215
 Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr
 3220 3225 3230
 Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr
 3235 3240 3245
 Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val
 3250 3255 3260
 Thr Pro Thr Pro Thr Thr Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro
 3265 3270 3275 3280
 Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr
 3285 3290 3295
 Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro
 3300 3305 3310
 Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
 3315 3320 3325
 Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr
 3330 3335 3340
 Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro
 3345 3350 3355 3360
 Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr
 3365 3370 3375
 Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr
 3380 3385 3390
 Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
 3395 3400 3405
 Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr
 3410 3415 3420
 Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
 3425 3430 3435 3440
 Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
 3445 3450 3455
 Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr
 3460 3465 3470
 Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile
 3475 3480 3485
 Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln
 3490 3495 3500

Sequence listing.txt

Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr
 3505 3510 3515 3520
 Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr
 3525 3530 3535
 Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro
 3540 3545 3550
 Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr
 3555 3560 3565
 Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
 3570 3575 3580
 Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr
 3585 3590 3595 3600
 Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr
 3605 3610 3615
 Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val
 3620 3625 3630
 Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro
 3635 3640 3645
 Ile Thr Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr
 3650 3655 3660
 Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro
 3665 3670 3675 3680
 Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
 3685 3690 3695
 Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr
 3700 3705 3710
 Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro
 3715 3720 3725
 Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr
 3730 3735 3740
 Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr
 3745 3750 3755 3760
 Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
 3765 3770 3775
 Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr
 3780 3785 3790
 Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
 3795 3800 3805
 Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
 3810 3815 3820
 Thr Gln Thr Pro Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr
 3825 3830 3835 3840
 Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile
 3845 3850 3855
 Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln
 3860 3865 3870
 Thr Pro Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr
 3875 3880 3885
 Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr
 3890 3895 3900
 Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro
 3905 3910 3915 3920
 Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr
 3925 3930 3935
 Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr
 3940 3945 3950
 Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr
 3955 3960 3965
 Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr
 3970 3975 3980
 Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val
 3985 3990 3995 4000
 Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro

Sequence listing.txt

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4005      4010      4015
Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr
4020      4025      4030
Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Val Thr Pro
4035      4040      4045
Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
4050      4055      4060
Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr
4065      4070      4075      4080
Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Val Thr Pro Thr Pro
4085      4090      4095
Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr
4100      4105      4110
Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr
4115      4120      4125
Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro
4130      4135      4140
Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr
4145      4150      4155      4160
Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr
4165      4170      4175
Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Thr Gly
4180      4185      4190
Thr Gln Thr Gly Pro Pro Thr His Thr Ser Thr Ala Pro Ile Ala Glu
4195      4200      4205
Leu Thr Thr Ser Asn Pro Pro Pro Glu Ser Ser Thr Pro Gln Thr Ser
4210      4215      4220
Arg Ser Thr Ser Ser Pro Leu Thr Glu Ser Thr Thr Leu Leu Ser Thr
4225      4230      4235      4240
Leu Pro Pro Ala Ile Glu Met Thr Ser Thr Ala Pro Pro Ser Thr Pro
4245      4250      4255
Thr Ala Pro Thr Thr Thr Ser Gly Gly His Thr Leu Ser Pro Pro Pro
4260      4265      4270
Ser Thr Thr Thr Ser Pro Pro Gly Thr Pro Thr Arg Gly Thr Thr Thr
4275      4280      4285
Gly Ser Ser Ser Ala Pro Thr Pro Ser Thr Val Gln Thr Thr Thr Thr
4290      4295      4300
Ser Ala Trp Thr Pro Thr Pro Thr Pro Leu Ser Thr Pro Ser Ile Ile
4305      4310      4315      4320
Arg Thr Thr Gly Leu Arg Pro Tyr Pro Ser Ser Val Leu Ile Cys Cys
4325      4330      4335
Val Leu Asn Asp Thr Tyr Tyr Ala Pro Gly Glu Glu Val Tyr Asn Gly
4340      4345      4350
Thr Tyr Gly Asp Thr Cys Tyr Phe Val Asn Cys Ser Leu Ser Cys Thr
4355      4360      4365
Leu Glu Phe Tyr Asn Trp Ser Cys Pro Ser Thr Pro Ser Pro Thr Pro
4370      4375      4380
Thr Pro Ser Lys Ser Thr Pro Thr Pro Ser Lys Pro Ser Ser Thr Pro
4385      4390      4395      4400
Ser Lys Pro Thr Pro Gly Thr Lys Pro Pro Glu Cys Pro Asp Phe Asp
4405      4410      4415
Pro Pro Arg Gln Glu Asn Glu Thr Trp Trp Leu Cys Asp Cys Phe Met
4420      4425      4430
Ala Thr Cys Lys Tyr Asn Asn Thr Val Glu Ile Val Lys Val Glu Cys
4435      4440      4445
Glu Pro Pro Pro Met Pro Thr Cys Ser Asn Gly Leu Gln Pro Val Arg
4450      4455      4460
Val Glu Asp Pro Asp Gly Cys Cys Trp His Trp Glu Cys Asp Cys Tyr
4465      4470      4475      4480
Cys Thr Gly Trp Gly Asp Pro His Tyr Val Thr Phe Asp Gly Leu Tyr
4485      4490      4495
Tyr Ser Tyr Gln Gly Asn Cys Thr Tyr Val Leu Val Glu Glu Ile Ser
4500      4505      4510

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Sequence listing.txt

Pro Ser Val Asp Asn Phe Gly Val Tyr Ile Asp Asn Tyr His Cys Asp
4515 4520 4525
Pro Asn Asp Lys Val Ser Cys Pro Arg Thr Leu Ile Val Arg His Glu
4530 4535 4540
Thr Gln Glu Val Leu Ile Lys Thr Val His Met Met Pro Met Gln Val
4545 4550 4555 4560
Gln Val Gln Val Asn Arg Gln Ala Val Ala Leu Pro Tyr Lys Lys Tyr
4565 4570 4575
Gly Leu Glu Val Tyr Gln Ser Gly Ile Asn Tyr Val Val Asp Ile Pro
4580 4585 4590
Glu Leu Gly Val Leu Val Ser Tyr Asn Gly Leu Ser Phe Ser Val Arg
4595 4600 4605
Leu Pro Tyr His Arg Phe Gly Asn Asn Thr Lys Gly Gln Cys Gly Thr
4610 4615 4620
Cys Thr Asn Thr Thr Ser Asp Asp Cys Ile Leu Pro Ser Gly Glu Ile
4625 4630 4635 4640
Val Ser Asn Cys Glu Ala Ala Ala Asp Gln Trp Leu Val Asn Asp Pro
4645 4650 4655
Ser Lys Pro His Cys Pro His Ser Ser Ser Thr Thr Lys Arg Pro Ala
4660 4665 4670
Val Thr Val Pro Gly Gly Gly Lys Thr Thr Pro His Lys Asp Cys Thr
4675 4680 4685
Pro Ser Pro Leu Cys Gln Leu Ile Lys Asp Ser Leu Phe Ala Gln Cys
4690 4695 4700
His Ala Leu Val Pro Pro Gln His Tyr Tyr Asp Ala Cys Val Phe Asp
4705 4710 4715 4720
Ser Cys Phe Met Pro Gly Ser Ser Leu Glu Cys Ala Ser Leu Gln Ala
4725 4730 4735
Tyr Ala Ala Leu Cys Ala Gln Gln Asn Ile Cys Leu Asp Trp Arg Asn
4740 4745 4750
His Thr His Gly Ala Cys Leu Val Glu Cys Pro Ser His Arg Glu Tyr
4755 4760 4765
Gln Ala Cys Gly Pro Ala Glu Glu Pro Thr Cys Lys Ser Ser Ser Ser
4770 4775 4780
Gln Gln Asn Asn Thr Val Leu Val Glu Gly Cys Phe Cys Pro Glu Gly
4785 4790 4795 4800
Thr Met Asn Tyr Ala Pro Gly Phe Asp Val Cys Val Lys Thr Cys Gly
4805 4810 4815
Cys Val Gly Pro Asp Asn Val Pro Arg Glu Phe Gly Glu His Phe Glu
4820 4825 4830
Phe Asp Cys Lys Asn Cys Val Cys Leu Glu Gly Gly Ser Gly Ile Ile
4835 4840 4845
Cys Gln Pro Lys Arg Cys Ser Gln Lys Pro Val Thr His Cys Val Glu
4850 4855 4860
Asp Gly Thr Tyr Leu Ala Thr Glu Val Asn Pro Ala Asp Thr Cys Cys
4865 4870 4875 4880
Asn Ile Thr Val Cys Lys Cys Asn Thr Ser Leu Cys Lys Glu Lys Pro
4885 4890 4895
Ser Val Cys Pro Leu Gly Phe Glu Val Lys Ser Lys Met Val Pro Gly
4900 4905 4910
Arg Cys Cys Pro Phe Tyr Trp Cys Glu Ser Lys Gly Val Cys Val His
4915 4920 4925
Gly Asn Ala Glu Tyr Gln Pro Gly Ser Pro Val Tyr Ser Ser Lys Cys
4930 4935 4940
Gln Asp Cys Val Cys Thr Asp Lys Val Asp Asn Asn Thr Leu Leu Asn
4945 4950 4955 4960
Val Ile Ala Cys Thr His Val Pro Cys Asn Thr Ser Cys Ser Pro Gly
4965 4970 4975
Phe Glu Leu Met Glu Ala Pro Gly Glu Cys Cys Lys Lys Cys Glu Gln
4980 4985 4990
Thr His Cys Ile Ile Lys Arg Pro Asp Asn Gln His Val Ile Leu Lys
4995 5000 5005
Pro Gly Asp Phe Lys Ser Asp Pro Lys Asn Asn Cys Thr Phe Phe Ser

Sequence listing.txt

```

      5010      5015      5020
Cys Val Lys Ile His Asn Gln Leu Ile Ser Ser Val Ser Asn Ile Thr
5025      5030      5035      5040
Cys Pro Asn Phe Asp Ala Ser Ile Cys Ile Pro Gly Ser Ile Thr Phe
      5045      5050      5055
Met Pro Asn Gly Cys Cys Lys Thr Cys Thr Pro Arg Asn Glu Thr Arg
      5060      5065      5070
Val Pro Cys Ser Thr Val Pro Val Thr Thr Glu Val Ser Tyr Ala Gly
      5075      5080      5085
Cys Thr Lys Thr Val Leu Met Asn His Cys Ser Gly Ser Cys Gly Thr
      5090      5095      5100
Phe Val Met Tyr Ser Ala Lys Ala Gln Ala Leu Asp His Ser Cys Ser
5105      5110      5115      5120
Cys Cys Lys Glu Glu Lys Thr Ser Gln Arg Glu Val Val Leu Ser Cys
      5125      5130      5135
Pro Asn Gly Gly Ser Leu Thr His Thr Tyr Thr His Ile Glu Ser Cys
      5140      5145      5150
Gln Cys Gln Asp Thr Val Cys Gly Leu Pro Thr Gly Thr Ser Arg Arg
      5155      5160      5165
Ala Arg Arg Ser Pro Arg His Leu Gly Ser Gly
5170      5175

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<210> 122
<211> 1217
<212> PRT
<213> Homo sapiens

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```

<400> 122
Ile Thr Ile Thr Glu Thr Thr Ser His Ser Thr Pro Ser Tyr Thr Thr
 1      5      10      15
Ser Ile Thr Thr Glu Thr Pro Ser His Ser Thr Pro Ser Tyr Thr
      20      25      30
Thr Ser Ile Thr Thr Thr Glu Thr Pro Ser His Ser Thr Pro Ser Phe
      35      40      45
Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr Ser His Ser Thr Pro Ser
      50      55      60
Phe Thr Ser Ser Ile Arg Thr Thr Glu Thr Thr Ser Tyr Ser Thr Pro
65      70      75      80
Ser Phe Thr Ser Ser Asn Thr Ile Thr Glu Thr Thr Ser His Ser Thr
      85      90      95
Pro Ser Tyr Ile Thr Ser Ile Thr Thr Thr Glu Thr Pro Ser Ser Ser
      100      105      110
Thr Pro Ser Phe Ser Ser Ser Ile Thr Thr Thr Glu Thr Thr Ser His
      115      120      125
Ser Thr Pro Gly Phe Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr Ser
      130      135      140
His Ser Thr Pro Ser Phe Thr Ser Ser Ile Thr Thr Thr Glu Thr Thr
145      150      155      160
Ser His Asp Thr Pro Ser Phe Thr Ser Ser Ile Thr Thr Ser Glu Thr
      165      170      175
Pro Ser His Ser Thr Pro Ser Ser Thr Ser Leu Ile Thr Thr Thr Lys
      180      185      190
Thr Thr Ser His Ser Thr Pro Ser Phe Thr Ser Ser Ile Thr Thr Thr
      195      200      205
Glu Thr Thr Ser His Ser Ala Arg Ser Phe Thr Ser Ser Ile Thr Thr
210      215      220
Thr Glu Thr Thr Ser His Asn Thr Arg Ser Phe Thr Ser Ser Ile Thr
225      230      235      240
Thr Thr Glu Thr Asn Ser His Ser Thr Thr Ser Phe Thr Ser Ser Ile
      245      250      255

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Sequence listing.txt

Thr	Thr	Thr	Glu	Thr	Thr	Ser	His	Ser	Thr	Pro	Ser	Phe	Ser	Ser	Ser
			260					265					270		
Ile	Thr	Thr	Thr	Glu	Thr	Pro	Leu	His	Ser	Thr	Pro	Gly	Leu	Thr	Ser
		275					280					285			
Trp	Val	Thr	Thr	Thr	Lys	Thr	Thr	Ser	His	Ile	Thr	Pro	Gly	Leu	Thr
	290					295					300				
Ser	Ser	Ile	Thr	Thr	Thr	Glu	Thr	Thr	Ser	His	Ser	Thr	Pro	Gly	Phe
305					310					315					320
Thr	Ser	Ser	Ile	Thr	Thr	Thr	Glu	Thr	Thr	Ser	Glu	Ser	Thr	Pro	Ser
				325						330				335	
Leu	Ser	Ser	Ser	Thr	Ile	Tyr	Ser	Thr	Val	Ser	Thr	Ser	Thr	Thr	Ala
				340					345				350		
Ile	Thr	Ser	His	Phe	Thr	Thr	Ser	Glu	Thr	Ala	Val	Thr	Pro	Thr	Pro
		355					360					365			
Val	Thr	Pro	Ser	Ser	Leu	Ser	Thr	Asp	Ile	Pro	Thr	Thr	Ser	Leu	Arg
	370					375					380				
Thr	Leu	Thr	Pro	Ser	Ser	Val	Gly	Thr	Ser	Thr	Ser	Leu	Thr	Thr	Thr
385					390					395					400
Thr	Asp	Phe	Pro	Ser	Ile	Pro	Thr	Asp	Ile	Ser	Thr	Leu	Pro	Thr	Arg
				405					410					415	
Thr	His	Ile	Ile	Ser	Ser	Ser	Pro	Ser	Ile	Gln	Ser	Thr	Glu	Thr	Ser
			420					425					430		
Ser	Leu	Val	Gly	Thr	Thr	Ser	Pro	Thr	Met	Ser	Thr	Val	Arg	Met	Thr
		435					440					445			
Leu	Arg	Ile	Thr	Glu	Asn	Thr	Pro	Ile	Ser	Ser	Phe	Ser	Thr	Ser	Ile
	450					455					460				
Val	Val	Ile	Pro	Glu	Thr	Pro	Thr	Gln	Thr	Pro	Pro	Val	Leu	Thr	Ser
465					470					475					480
Ala	Thr	Gly	Thr	Gln	Thr	Ser	Pro	Ala	Pro	Thr	Thr	Val	Thr	Phe	Gly
				485					490					495	
Ser	Thr	Asp	Ser	Ser	Thr	Ser	Thr	Leu	His	Thr	Leu	Thr	Pro	Ser	Thr
			500					505					510		
Ala	Leu	Ser	Thr	Ile	Val	Ser	Thr	Ser	Gln	Val	Pro	Ile	Pro	Ser	Thr
		515					520					525			
His	Ser	Ser	Thr	Leu	Gln	Thr	Thr	Pro	Ser	Thr	Pro	Ser	Leu	Gln	Thr
	530					535					540				
Ser	Leu	Thr	Ser	Thr	Ser	Glu	Phe	Thr	Thr	Glu	Ser	Phe	Thr	Arg	Gly
545					550					555					560
Ser	Thr	Ser	Thr	Asn	Ala	Ile	Leu	Thr	Ser	Phe	Ser	Thr	Ile	Ile	Trp
				565					570					575	
Ser	Ser	Thr	Pro	Thr	Ile	Ile	Met	Ser	Ser	Ser	Pro	Ser	Ser	Ala	Ser
			580					585					590		
Ile	Thr	Pro	Val	Phe	Ser	Thr	Thr	Ile	His	Ser	Val	Pro	Ser	Ser	Pro
		595					600					605			
Tyr	Ile	Phe	Ser	Thr	Glu	Asn	Val	Gly	Ser	Ala	Ser	Ile	Thr	Gly	Phe
	610					615					620				
Pro	Ser	Leu	Ser	Ser	Ser	Ala	Thr	Thr	Ser	Thr	Ser	Ser	Thr	Ser	Ser
625					630					635					640
Ser	Leu	Thr	Thr	Ala	Leu	Thr	Glu	Ile	Thr	Pro	Phe	Ser	Tyr	Ile	Ser
				645					650					655	
Leu	Pro	Ser	Thr	Thr	Pro	Cys	Pro	Gly	Thr	Ile	Thr	Ile	Thr	Ile	Val
			660					665					670		
Pro	Ala	Ser	Pro	Thr	Asp	Pro	Cys	Val	Glu	Met	Asp	Pro	Ser	Thr	Glu
		675					680					685			
Ala	Thr	Ser	Pro	Pro	Thr	Thr	Pro	Leu	Thr	Val	Phe	Pro	Phe	Thr	Thr
	690					695					700				
Glu	Met	Val	Thr	Cys	Pro	Thr	Ser	Ile	Ser	Ile	Gln	Thr	Thr	Leu	Thr
705					710					715					720
Thr	Tyr	Met	Asp	Thr	Ser	Ser	Met	Met	Pro	Glu	Ser	Glu	Ser	Ser	Ile
				725					730					735	
Ser	Pro	Asn	Ala	Ser	Ser	Ser	Thr	Gly	Thr	Gly	Thr	Val	Pro	Thr	Asn
			740					745					750		
Thr	Val	Phe	Thr	Ser	Thr	Arg	Leu	Pro	Thr	Ser	Glu	Thr	Trp	Leu	Ser

Sequence listing.txt

```

      755      760      765
Asn Ser Ser Val Ile Pro Leu Pro Leu Pro Gly Val Ser Thr Ile Pro
 770      775      780
Leu Thr Met Lys Pro Ser Ser Ser Leu Pro Thr Ile Leu Arg Thr Ser
 785      790      795
Ser Lys Ser Thr His Pro Ser Pro Pro Thr Thr Arg Thr Ser Glu Thr
      800      805      810      815
Pro Val Ala Thr Thr Gln Thr Pro Thr Thr Leu Thr Ser Arg Arg Thr
      820      825      830
Thr Arg Ile Thr Ser Gln Met Thr Thr Gln Ser Thr Leu Thr Thr Thr
      835      840      845
Ala Gly Thr Cys Asp Asn Gly Gly Thr Trp Glu Gln Gly Gln Cys Ala
      850      855      860
Cys Leu Pro Gly Phe Ser Gly Asp Arg Cys Gln Leu Gln Thr Arg Cys
 865      870      875      880
Gln Asn Gly Gly Gln Trp Asp Gly Leu Lys Cys Gln Cys Pro Ser Thr
      885      890      895
Phe Tyr Gly Ser Ser Cys Glu Phe Ala Val Glu Gln Val Asp Leu Asp
      900      905      910
Val Val Glu Thr Glu Val Gly Met Glu Val Ser Val Asp Gln Gln Phe
      915      920      925
Ser Pro Asp Leu Asn Asp Asn Thr Ser Gln Ala Tyr Arg Asp Phe Asn
      930      935      940
Lys Thr Phe Trp Asn Gln Met Gln Lys Ile Phe Ala Asp Met Gln Gly
 945      950      955      960
Phe Thr Phe Lys Gly Val Glu Ile Leu Ser Leu Arg Asn Gly Ser Ile
      965      970      975
Val Val Asp Tyr Leu Val Leu Leu Glu Met Pro Phe Ser Pro Gln Leu
      980      985      990
Glu Ser Glu Tyr Glu Gln Val Lys Thr Thr Leu Lys Glu Gly Leu Gln
      995      1000      1005
Asn Ala Ser Gln Asp Val Asn Ser Cys Gln Asp Ser Gln Thr Leu Cys
      1010      1015      1020
Phe Lys Pro Asp Ser Ile Lys Val Asn Asn Asn Ser Lys Thr Glu Leu
 1025      1030      1035      1040
Thr Pro Ala Ala Ile Cys Arg Arg Ala Ala Pro Thr Gly Tyr Glu Glu
      1045      1050      1055
Phe Tyr Phe Pro Leu Val Glu Ala Thr Arg Leu Arg Cys Val Thr Lys
      1060      1065      1070
Cys Thr Ser Gly Val Asp Asn Ala Ile Asp Cys His Gln Gly Gln Cys
      1075      1080      1085
Val Leu Glu Thr Ser Gly Pro Thr Cys Arg Cys Tyr Ser Thr Asp Thr
      1090      1095      1100
His Trp Phe Ser Gly Pro Arg Cys Glu Val Ala Val His Trp Arg Ala
 1105      1110      1115      1120
Leu Val Gly Gly Leu Thr Ala Gly Ala Ala Leu Leu Val Leu Leu
      1125      1130      1135
Leu Ala Leu Gly Val Arg Ala Val Arg Ser Gly Trp Trp Gly Gly Gln
      1140      1145      1150
Arg Arg Gly Arg Ser Trp Asp Gln Asp Arg Lys Trp Phe Glu Thr Trp
      1155      1160      1165
Asp Glu Glu Val Val Gly Thr Phe Ser Asn Trp Gly Phe Glu Asp Asp
      1170      1175      1180
Gly Thr Asp Lys Asp Thr Asn Phe Tyr Val Ala Leu Glu Asn Val Asp
 1185      1190      1195      1200
Thr Thr Met Lys Val His Ile Lys Arg Pro Glu Met Thr Ser Ser Ser
      1205      1210      1215
Val

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<210> 123
<211> 1373

Sequence listing.txt

<212> PRT

<213> Homo sapiens

<400> 123

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Met Ser Val Gly Arg Arg Lys Leu Ala Leu Leu Trp Ala Leu Ala Leu
 1      5      10      15
Ala Leu Ala Cys Thr Arg His Thr Gly His Ala Gln Asp Gly Ser Ser
 20      25      30
Glu Ser Ser Tyr Lys His His Pro Ala Leu Ser Pro Ile Ala Arg Gly
 35      40      45
Pro Ile Gly Val Pro Leu Arg Gly Ala Thr Val Phe Pro Ser Leu Arg
 50      55      60
Thr Ile Pro Val Val Arg Ala Ser Asn Pro Ala His Asn Gly Arg Val
 65      70      75      80
Cys Ser Thr Trp Gly Ser Phe His Tyr Lys Thr Phe Asp Gly Asp Val
 85      90      95
Phe Arg Phe Pro Gly Leu Cys Asn Tyr Val Phe Ser Glu His Cys Gly
100      105      110
Ala Ala Tyr Glu Asp Phe Asn Ile Pro Ala Thr Pro Gln Pro Gly Val
115      120      125
Ser Gly Pro His Ala Glu Gln Gly Pro His Glu Gly Gly Trp Arg Gly
130      135      140
His Pro Ala Asp Gln Gly Leu Arg Pro Gly Gln Arg Pro Pro Gly Pro
145      150      155      160
Ala Ala Leu Gln Pro Val Trp Gly Pro His Ser Ala Arg Ala Ala Ala
165      170      175
Thr Pro Arg Trp Lys Pro Gly Trp Ala Leu Ser Ser Cys Gly Thr Thr
180      185      190
Met Thr Ala Cys Cys Trp Lys Leu Asp Thr Lys Tyr Ala Asn Lys Asn
195      200      205
Leu Trp Ala Leu Trp Gly Leu Gln Arg Asp Ala Arg Gly Gln Arg Ala
210      215      220
Pro Leu Pro Gln His Gln Ala Asp Thr His Gly Ile Arg Glu Pro Ala
225      230      235
Glu Arg Trp Thr Asn Pro Arg Ser Ser Val Arg Thr Leu Ser Leu Asn
245      250      255
Pro Arg Arg Thr Ala Pro Leu Ala Leu Ala Ser Cys Glu Glu Leu Leu
260      265      270
His Gly Gln Leu Phe Ser Gly Cys Val Ala Leu Val Asp Val Gly Ser
275      280      285
Tyr Leu Glu Ala Cys Arg Gln Asp Leu Cys Phe Cys Glu Asp Thr Asp
290      295      300
Leu Leu Ser Cys Val Cys His Thr Leu Ala Glu Tyr Ser Arg Gln Cys
305      310      315      320
Thr His Ala Gly Gly Leu Pro Gln Asp Trp Arg Gly Pro Asp Phe Cys
325      330      335
Pro Gln Lys Cys Pro Asn Asn Met Gln Tyr His Glu Cys Arg Ser Pro
340      345      350
Cys Ala Asp Thr Cys Ser Asn Gln Glu His Ser Arg Ala Cys Glu Asp
355      360      365
His Cys Val Ala Gly Cys Phe Cys Pro Glu Gly Thr Val Leu Asp Asp
370      375      380
Ile Gly Gln Thr Gly Cys Val Pro Val Ser Lys Cys Ala Cys Val Tyr
385      390      395      400
Asn Gly Ala Ala Tyr Ala Pro Gly Ala Thr Tyr Ser Thr Asp Cys Thr
405      410      415
Asn Cys Thr Cys Ser Gly Gly Arg Trp Ser Cys Gln Glu Val Pro Cys
420      425      430
Pro Gly Thr Cys Ser Val Leu Gly Ala His Phe Ser Thr Phe Asp
435      440      445
Gly Lys Gln Tyr Thr Val His Gly Asp Cys Ser Tyr Val Leu Thr Lys
450      455      460
Pro Cys Asp Ser Ser Ala Phe Thr Val Leu Ala Glu Leu Arg Arg Cys

```

Sequence listing.txt

```

465      470      475      480
Gly Leu Thr Asp Ser Glu Thr Cys Leu Lys Ser Val Thr Leu Ser Leu
      485
Asp Gly Ala Gln Thr Val Val Val Ile Lys Ala Ser Gly Glu Val Phe
      500
Leu Asn Gln Ile Tyr Thr Gln Leu Pro Ile Ser Ala Ala Asn Val Thr
      515
Ile Phe Arg Pro Ser Thr Phe Phe Ile Ile Ala Gln Thr Ser Leu Gly.
      530
Leu Gln Leu Asn Leu Gln Leu Val Pro Thr Met Gln Leu Phe Met Gln
      545
Leu Ala Pro Lys Leu Arg Gly Gln Thr Cys Gly Leu Cys Gly Asn Phe
      565
Asn Ser Ile Gln Ala Asp Asp Phe Arg Thr Leu Ser Gly Val Val Glu
      580
Ala Thr Ala Ala Ala Phe Phe Asn Thr Phe Lys Thr Gln Ala Ala Cys
      595
Pro Asn Ile Arg Asn Ser Phe Glu Asp Pro Cys Ser Leu Ser Val Glu
      610
Asn Glu Lys Tyr Ala Gln His Trp Cys Ser Gln Leu Thr Asp Ala Asp
      625
Gly Pro Phe Gly Arg Cys His Ala Ala Val Lys Pro Gly Thr Tyr Tyr
      645
Ser Asn Cys Met Phe Asp Thr Cys Asn Cys Glu Arg Ser Glu Asp Cys
      660
Leu Cys Ala Ala Leu Ser Ser Tyr Val His Ala Cys Ala Ala Lys Gly
      675
Val Gln Leu Gly Gly Trp Arg Asp Gly Val Cys Thr Lys Pro Met Thr
      690
Thr Cys Pro Lys Ser Met Thr Tyr His Tyr His Val Ser Thr Cys Gln
      705
Pro Thr Cys Arg Ser Leu Ser Glu Gly Asp Ile Thr Cys Ser Val Gly
      725
Phe Ile Pro Val Asp Gly Cys Ile Cys Pro Lys Gly Thr Phe Leu Asp
      740
Asp Thr Gly Lys Cys Val Gln Ala Ser Asn Cys Pro Cys Tyr His Arg
      755
Gly Ser Met Ile Pro Asn Gly Glu Ser Val His Asp Ser Gly Ala Ile
      770
Cys Thr Cys Thr His Gly Lys Leu Ser Cys Ile Gly Gly Gln Ala Pro
      785
Ala Pro Val Cys Ala Ala Pro Met Val Phe Phe Asp Cys Arg Asn Ala
      805
Thr Pro Gly Asp Thr Gly Ala Gly Cys Gln Lys Ser Cys His Thr Leu
      820
Asp Met Thr Cys Tyr Ser Pro Gln Cys Val Pro Gly Cys Val Cys Pro
      835
Asp Gly Leu Val Ala Asp Gly Glu Gly Gly Cys Ile Thr Ala Glu Asp
      850
Cys Pro Cys Val His Asn Glu Ala Ser Tyr Arg Ala Gly Gln Thr Ile
      865
Arg Val Gly Cys Asn Thr Cys Thr Cys Asp Ser Arg Met Trp Arg Cys
      885
Thr Asp Asp Pro Cys Leu Ala Thr Cys Ala Val Tyr Gly Asp Gly His
      900
Tyr Leu Thr Phe Asp Gly Gln Ser Tyr Ser Phe Asn Glu Glu Thr Ala
      915
Ser Thr Arg Trp Cys Arg Thr Ala Val Ala Gly Lys Thr Ala Pro Arg
      930
Thr Pro Phe Val Leu Ser Pro Arg Thr Ser Pro Ala Ala Pro Gln Gly
      945
Pro Pro Ala Pro Arg Pro Ser Arg Phe Ser Trp Gly Asn Phe Glu Leu
      965
      970
      975

```

Sequence listing.txt

Lys Leu Ser His Gly Lys Val Glu Val Ile Gly Thr Asp Glu Ser Gln
 980 985 990
 Glu Val Pro Tyr Thr Ile Arg Gln Met Gly Ile Tyr Leu Val Val Asp
 995 1000 1005
 Thr Asp Ile Gly Leu Val Leu Leu Trp Asp Lys Lys Thr Ser Ile Phe
 1010 1015 1020
 Ile Asn Leu Ser Pro Glu Phe Lys Gly Arg Val Cys Gly Leu Cys Gly
 1025 1030 1035 1040
 Asn Phe Asp Asp Ile Ala Val Asn Asp Phe Ala Thr Arg Ser Arg Ser
 1045 1050 1055
 Val Val Gly Asp Val Leu Glu Phe Gly Asn Ser Trp Lys Leu Ser Pro
 1060 1065 1070
 Ser Cys Pro Asp Ala Leu Ala Pro Lys Asp Pro Cys Thr Ala Asn Pro
 1075 1080 1085
 Phe Arg Lys Ser Trp Ala Gln Lys Gln Cys Ser Ile Leu His Gly Pro
 1090 1095 1100
 Thr Phe Ala Ala Cys His Ala His Val Glu Pro Ala Arg Tyr Tyr Glu
 1105 1110 1115 1120
 Ala Cys Val Asn Asp Ala Cys Ala Cys Asp Ser Gly Gly Asp Cys Glu
 1125 1130 1135
 Cys Phe Cys Thr Ala Val Ala Arg Tyr Ala Gln Ala Cys His Glu Val
 1140 1145 1150
 Gly Thr Cys Val Cys Leu Arg Thr Pro Ser Ile Cys Pro Leu Phe Cys
 1155 1160 1165
 Asp Tyr Tyr Asn Pro Glu Gly Gln Cys Glu Trp His Tyr Gln Pro Cys
 1170 1175 1180
 Gly Val Pro Cys Leu Arg Thr Cys Arg Asn Pro Arg Gly Asp Cys Leu
 1185 1190 1195 1200
 Arg Asp Val Arg Gly Leu Glu Gly Cys Tyr Pro Lys Cys Pro Pro Glu
 1205 1210 1215
 Ala Pro Ile Phe Asp Glu Asp Lys Met Gln Cys Val Ala Thr Cys Pro
 1220 1225 1230
 Thr Pro Pro Leu Pro Pro Arg Cys His Val His Gly Lys Ser Tyr Arg
 1235 1240 1245
 Pro Gly Ala Val Val Pro Ser Asp Lys Asn Cys Gln Ser Cys Leu Cys
 1250 1255 1260
 Thr Glu Arg Gly Val Glu Cys Thr Tyr Lys Ala Glu Ala Cys Val Cys
 1265 1270 1275 1280
 Thr Tyr Asn Gly Gln Arg Phe His Pro Gly Asp Val Ile Tyr His Thr
 1285 1290 1295
 Thr Asp Gly Thr Gly Gly Cys Ile Ser Ala Arg Cys Gly Ala Asn Gly
 1300 1305 1310
 Thr Ile Glu Arg Arg Val Tyr Pro Cys Ser Pro Thr Thr Pro Val Pro
 1315 1320 1325
 Pro Thr Thr Phe Ser Phe Ser Thr Pro Pro Leu Val Val Ser Ser Thr
 1330 1335 1340
 His Thr Pro Ser Asn Gly Pro Ser Ser Ala His Thr Gly Pro Pro Ser
 1345 1350 1355 1360
 Ser Ala Trp Pro Thr Thr Ala Gly Thr Ser Pro Arg Thr
 1365 1370

<210> 124
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 124
 Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly
 1 5 10 15
 Gly Thr Trp Ala Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile
 20 25 30
 Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
 Page 140

Sequence listing.txt

```

      35      40      45
Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Thr Arg Val
  50      55      60
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
  65      70      75      80
Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
      85      90      95
Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
      100      105      110
Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
      115      120      125
Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Lys Ala Pro
      130      135      140
Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
      145      150      155      160
Pro Ile Leu Pro Gln
      165

```

<210> 125
 <211> 1210
 <212> PRT
 <213> Homo sapiens

```

<400> 125
Met Arg Pro Ser Gly Thr Ala Gly Ala Ala Leu Leu Ala Leu Ala
  1      5      10      15
Ala Leu Cys Pro Ala Ser Arg Ala Leu Glu Glu Lys Lys Val Cys Gln
      20      25      30
Gly Thr Ser Asn Lys Leu Thr Gln Leu Gly Thr Phe Glu Asp His Phe
      35      40      45
Leu Ser Leu Gln Arg Met Phe Asn Asn Cys Glu Val Val Leu Gly Asn
      50      55      60
Leu Glu Ile Thr Tyr Val Gln Arg Asn Tyr Asp Leu Ser Phe Leu Lys
      65      70      75      80
Thr Ile Gln Glu Val Ala Gly Tyr Val Leu Ile Ala Leu Asn Thr Val
      85      90      95
Glu Arg Ile Pro Leu Glu Asn Leu Gln Ile Ile Arg Gly Asn Met Tyr
      100      105      110
Tyr Glu Asn Ser Tyr Ala Leu Ala Val Leu Ser Asn Tyr Asp Ala Asn
      115      120      125
Lys Thr Gly Leu Lys Glu Leu Pro Met Arg Asn Leu Gln Glu Ile Leu
      130      135      140
His Gly Ala Val Arg Phe Ser Asn Asn Pro Ala Leu Cys Asn Val Glu
      145      150      155      160
Ser Ile Gln Trp Arg Asp Ile Val Ser Ser Asp Phe Leu Ser Asn Met
      165      170      175
Ser Met Asp Phe Gln Asn His Leu Gly Ser Cys Gln Lys Cys Asp Pro
      180      185      190
Ser Cys Pro Asn Gly Ser Cys Trp Gly Ala Gly Glu Glu Asn Cys Gln
      195      200      205
Lys Leu Thr Lys Ile Ile Cys Ala Gln Gln Cys Ser Gly Arg Cys Arg
      210      215      220
Gly Lys Ser Pro Ser Asp Cys Cys His Asn Gln Cys Ala Ala Gly Cys
      225      230      235      240
Thr Gly Pro Arg Glu Ser Asp Cys Leu Val Cys Arg Lys Phe Arg Asp
      245      250      255
Glu Ala Thr Cys Lys Asp Thr Cys Pro Pro Leu Met Leu Tyr Asn Pro
      260      265      270
Thr Thr Tyr Gln Met Asp Val Asn Pro Glu Gly Lys Tyr Ser Phe Gly
      275      280      285
Ala Thr Cys Val Lys Lys Cys Pro Arg Asn Tyr Val Val Thr Asp His
      290      295      300

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Sequence listing.txt

Gly Ser Cys Val Arg Ala Cys Gly Ala Asp Ser Tyr Glu Met Glu Glu
 305 310 315 320
 Asp Gly Val Arg Lys Cys Lys Lys Cys Glu Gly Pro Cys Arg Lys Val
 325 330 335
 Cys Asn Gly Ile Gly Ile Gly Glu Phe Lys Asp Ser Leu Ser Ile Asn
 340 345 350
 Ala Thr Asn Ile Lys His Phe Lys Asn Cys Thr Ser Ile Ser Gly Asp
 355 360 365
 Leu His Ile Leu Pro Val Ala Phe Arg Gly Asp Ser Phe Thr His Thr
 370 375 380
 Pro Pro Leu Asp Pro Gln Glu Leu Asp Ile Leu Lys Thr Val Lys Glu
 385 390 395 400
 Ile Thr Gly Phe Leu Leu Ile Gln Ala Trp Pro Glu Asn Arg Thr Asp
 405 410 415
 Leu His Ala Phe Glu Asn Leu Glu Ile Ile Arg Gly Arg Thr Lys Gln
 420 425 430
 His Gly Gln Phe Ser Leu Ala Val Val Ser Leu Asn Ile Thr Ser Leu
 435 440 445
 Gly Leu Arg Ser Leu Lys Glu Ile Ser Asp Gly Asp Val Ile Ile Ser
 450 455 460
 Gly Asn Lys Asn Leu Cys Tyr Ala Asn Thr Ile Asn Trp Lys Lys Leu
 465 470 475 480
 Phe Gly Thr Ser Gly Gln Lys Thr Lys Ile Ile Ser Asn Arg Gly Glu
 485 490 495
 Asn Ser Cys Lys Ala Thr Gly Gln Val Cys His Ala Leu Cys Ser Pro
 500 505 510
 Glu Gly Cys Trp Gly Pro Glu Pro Arg Asp Cys Val Ser Cys Arg Asn
 515 520 525
 Val Ser Arg Gly Arg Glu Cys Val Asp Lys Cys Lys Leu Leu Glu Gly
 530 535 540
 Glu Pro Arg Glu Phe Val Glu Asn Ser Glu Cys Ile Gln Cys His Pro
 545 550 555 560
 Glu Cys Leu Pro Gln Ala Met Asn Ile Thr Cys Thr Gly Arg Gly Pro
 565 570 575
 Asp Asn Cys Ile Gln Cys Ala His Tyr Ile Asp Gly Pro His Cys Val
 580 585 590
 Lys Thr Cys Pro Ala Gly Val Met Gly Glu Asn Asn Thr Leu Val Trp
 595 600 605
 Lys Tyr Ala Asp Ala Gly His Val Cys His Leu Cys His Pro Asn Cys
 610 615 620
 Thr Tyr Gly Cys Thr Gly Pro Gly Leu Glu Gly Cys Pro Thr Asn Gly
 625 630 635 640
 Pro Lys Ile Pro Ser Ile Ala Thr Gly Met Val Gly Ala Leu Leu Leu
 645 650 655
 Leu Leu Val Val Ala Leu Gly Ile Gly Leu Phe Met Arg Arg Arg His
 660 665 670
 Ile Val Arg Lys Arg Thr Leu Arg Arg Leu Leu Gln Glu Arg Glu Leu
 675 680 685
 Val Glu Pro Leu Thr Pro Ser Gly Glu Ala Pro Asn Gln Ala Leu Leu
 690 695 700
 Arg Ile Leu Lys Glu Thr Glu Phe Lys Lys Ile Lys Val Leu Gly Ser
 705 710 715 720
 Gly Ala Phe Gly Thr Val Tyr Lys Gly Leu Trp Ile Pro Glu Gly Glu
 725 730 735
 Lys Val Lys Ile Pro Val Ala Ile Lys Glu Leu Arg Glu Ala Thr Ser
 740 745 750
 Pro Lys Ala Asn Lys Glu Ile Leu Asp Glu Ala Tyr Val Met Ala Ser
 755 760 765
 Val Asp Asn Pro His Val Cys Arg Leu Leu Gly Ile Cys Leu Thr Ser
 770 775 780
 Thr Val Gln Leu Ile Thr Gln Leu Met Pro Phe Gly Cys Leu Leu Asp
 785 790 795 800
 Tyr Val Arg Glu His Lys Asp Asn Ile Gly Ser Gln Tyr Leu Leu Asn

Sequence listing.txt

805
 Trp Cys Val Gln Ile Ala Lys Gly Met Asn Tyr Leu Glu Asp Arg Arg
 820
 Leu Val His Arg Asp Leu Ala Ala Arg Asn Val Leu Val Lys Thr Pro
 835
 Gln His Val Lys Ile Thr Asp Phe Gly Leu Ala Lys Leu Leu Gly Ala
 850
 Glu Glu Lys Glu Tyr His Ala Glu Gly Gly Lys Val Pro Ile Lys Trp
 865
 Met Ala Leu Glu Ser Ile Leu His Arg Ile Tyr Thr His Gln Ser Asp
 885
 Val Trp Ser Tyr Gly Val Thr Val Trp Glu Leu Met Thr Phe Gly Ser
 900
 Lys Pro Tyr Asp Gly Ile Pro Ala Ser Glu Ile Ser Ser Ile Leu Glu
 915
 Lys Gly Glu Arg Leu Pro Gln Pro Pro Ile Cys Thr Ile Asp Val Tyr
 930
 Met Ile Met Val Lys Cys Trp Met Ile Asp Ala Asp Ser Arg Pro Lys
 945
 Phe Arg Glu Leu Ile Ile Glu Phe Ser Lys Met Ala Arg Asp Pro Gln
 965
 Arg Tyr Leu Val Ile Gln Gly Asp Glu Arg Met His Leu Pro Ser Pro
 980
 Thr Asp Ser Asn Phe Tyr Arg Ala Leu Met Asp Glu Glu Asp Met Asp
 995
 Asp Val Val Asp Ala Asp Glu Tyr Leu Ile Pro Gln Gln Gly Phe Phe
 1010
 Ser Ser Pro Ser Thr Ser Arg Thr Pro Leu Leu Ser Ser Leu Ser Ala
 1025
 Thr Ser Asn Asn Ser Thr Val Ala Cys Ile Asp Arg Asn Gly Leu Gln
 1045
 Ser Cys Pro Ile Lys Glu Asp Ser Phe Leu Gln Arg Tyr Ser Ser Asp
 1060
 Pro Thr Gly Ala Leu Thr Glu Asp Ser Ile Asp Asp Thr Phe Leu Pro
 1075
 Val Pro Glu Tyr Ile Asn Gln Ser Val Pro Lys Arg Pro Ala Gly Ser
 1090
 Val Gln Asn Pro Val Tyr His Asn Gln Pro Leu Asn Pro Ala Pro Ser
 1105
 Arg Asp Pro His Tyr Gln Asp Pro His Ser Thr Ala Val Gly Asn Pro
 1125
 Glu Tyr Leu Asn Thr Val Gln Pro Thr Cys Val Asn Ser Thr Phe Asp
 1140
 Ser Pro Ala His Trp Ala Gln Lys Gly Ser His Gln Ile Ser Leu Asp
 1155
 Asn Pro Asp Tyr Gln Gln Asp Phe Phe Pro Lys Glu Ala Lys Pro Asn
 1170
 Gly Ile Phe Lys Gly Ser Thr Ala Glu Asn Ala Glu Tyr Leu Arg Val
 1185
 Ala Pro Gln Ser Ser Glu Phe Ile Gly Ala
 1205
 1210

<210> 126
 <211> 1255
 <212> PRT
 <213> Homo sapiens

<400> 126
 Met Glu Leu Ala Ala Leu Cys Arg Trp Gly Leu Leu Leu Ala Leu Leu
 1 5 10 15
 Pro Pro Gly Ala Ala Ser Thr Gln Val Cys Thr Gly Thr Asp Met Lys
 20 25 30

Sequence listing.txt

Leu Arg Leu Pro Ala Ser Pro Glu Thr His Leu Asp Met Leu Arg His
 35 40 45
 Leu Tyr Gln Gly Cys Gln Val Val Gln Gly Asn Leu Glu Leu Thr Tyr
 50 55 60
 Leu Pro Thr Asn Ala Ser Leu Ser Phe Leu Gln Asp Ile Gln Glu Val
 65 70 75 80
 Gln Gly Tyr Val Leu Ile Ala His Asn Gln Val Arg Gln Val Pro Leu
 85 90 95
 Gln Arg Leu Arg Ile Val Arg Gly Thr Gln Leu Phe Glu Asp Asn Tyr
 100 105 110
 Ala Leu Ala Val Leu Asp Asn Gly Asp Pro Leu Asn Asn Thr Thr Pro
 115 120 125
 Val Thr Gly Ala Ser Pro Gly Gly Leu Arg Glu Leu Gln Leu Arg Ser
 130 135 140
 Leu Thr Glu Ile Leu Lys Gly Gly Val Leu Ile Gln Arg Asn Pro Gln
 145 150 155 160
 Leu Cys Tyr Gln Asp Thr Ile Leu Trp Lys Asp Ile Phe His Lys Asn
 165 170 175
 Asn Gln Leu Ala Leu Thr Leu Ile Asp Thr Asn Arg Ser Arg Ala Cys
 180 185 190
 His Pro Cys Ser Pro Met Cys Lys Gly Ser Arg Cys Trp Gly Glu Ser
 195 200 205
 Ser Glu Asp Cys Gln Ser Leu Thr Arg Thr Val Cys Ala Gly Gly Cys
 210 215 220
 Ala Arg Cys Lys Gly Pro Leu Pro Thr Asp Cys Cys His Glu Gln Cys
 225 230 235 240
 Ala Ala Gly Cys Thr Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu
 245 250 255
 His Phe Asn His Ser Gly Ile Cys Glu Leu His Cys Pro Ala Leu Val
 260 265 270
 Thr Tyr Asn Thr Asp Thr Phe Glu Ser Met Pro Asn Pro Glu Gly Arg
 275 280 285
 Tyr Thr Phe Gly Ala Ser Cys Val Thr Ala Cys Pro Tyr Asn Tyr Leu
 290 295 300
 Ser Thr Asp Val Gly Ser Cys Thr Leu Val Cys Pro Leu His Asn Gln
 305 310 315 320
 Glu Val Thr Ala Glu Asp Gly Thr Gln Arg Cys Glu Lys Cys Ser Lys
 325 330 335
 Pro Cys Ala Arg Val Cys Tyr Gly Leu Gly Met Glu His Leu Arg Glu
 340 345 350
 Val Arg Ala Val Thr Ser Ala Asn Ile Gln Glu Phe Ala Gly Cys Lys
 355 360 365
 Lys Ile Phe Gly Ser Leu Ala Phe Leu Pro Glu Ser Phe Asp Gly Asp
 370 375 380
 Pro Ala Ser Asn Thr Ala Pro Leu Gln Pro Glu Gln Leu Gln Val Phe
 385 390 395 400
 Glu Thr Leu Glu Glu Ile Thr Gly Tyr Leu Tyr Ile Ser Ala Trp Pro
 405 410 415
 Asp Ser Leu Pro Asp Leu Ser Val Phe Gln Asn Leu Gln Val Ile Arg
 420 425 430
 Gly Arg Ile Leu His Asn Gly Ala Tyr Ser Leu Thr Leu Gln Gly Leu
 435 440 445
 Gly Ile Ser Trp Leu Gly Leu Arg Ser Leu Arg Glu Leu Gly Ser Gly
 450 455 460
 Leu Ala Leu Ile His His Asn Thr His Leu Cys Phe Val His Thr Val
 465 470 475 480
 Pro Trp Asp Gln Leu Phe Arg Asn Pro His Gln Ala Leu Leu His Thr
 485 490 495
 Ala Asn Arg Pro Glu Asp Glu Cys Val Gly Glu Gly Leu Ala Cys His
 500 505 510
 Gln Leu Cys Ala Arg Gly His Cys Trp Gly Pro Gly Pro Thr Gln Cys
 515 520 525
 Val Asn Cys Ser Gln Phe Leu Arg Gly Gln Glu Cys Val Glu Glu Cys

Sequence listing.txt

530	535	540															
Arg Val Leu Gln Gly	Leu Pro Arg Glu Tyr Val	Asn Ala Arg His Cys															
545	550	555															560
Leu Pro Cys His Pro	Glu Cys Gln Pro Gln	Asn Gly Ser Val Thr															Cys
	565	570															575
Phe Gly Pro Glu Ala	Asp Gln Cys Val Ala	Cys Ala His Tyr Lys															Asp
	580	585															
Pro Pro Phe Cys Val	Ala Arg Cys Pro Ser	Gly Val Lys Pro Asp															Leu
	595	600															
Ser Tyr Met Pro Ile	Trp Lys Phe Pro Asp	Glu Glu Gly Ala Cys															Gln
	610	615															
Pro Cys Pro Ile Asn	Cys Thr His Ser Cys	Val Asp Leu Asp Asp															Lys
	625	630															
Gly Cys Pro Ala Glu	Gln Arg Ala Ser Pro	Leu Thr Ser Ile Val															Ser
	645	650															
Ala Val Val Gly Ile	Leu Leu Val Val Val	Leu Gly Val Val Phe															Gly
	660	665															
Ile Leu Ile Lys Arg	Arg Gln Gln Lys Ile	Arg Lys Tyr Thr Met															Arg
	675	680															
Arg Leu Leu Gln Glu	Thr Glu Leu Val Glu	Pro Leu Thr Pro Ser															Gly
	690	695															
Ala Met Pro Asn Gln	Ala Gln Met Arg Ile	Leu Lys Glu Thr Glu															Leu
	705	710															
Arg Lys Val Lys Val	Leu Gly Ser Gly Ala	Phe Gly Thr Val Tyr															Lys
	725	730															
Gly Ile Trp Ile Pro	Asp Gly Glu Asn Val	Lys Ile Pro Val Ala															Ile
	740	745															
Lys Val Leu Arg Glu	Asn Thr Ser Pro Lys	Ala Asn Lys Glu Ile															Leu
	755	760															
Asp Glu Ala Tyr Val	Met Ala Gly Val Gly	Ser Pro Tyr Val Ser															Arg
	770	775															
Leu Leu Gly Ile Cys	Leu Thr Ser Thr Val	Gln Leu Val Thr Gln															Leu
	785	790															
Met Pro Tyr Gly Cys	Leu Leu Asp His Val	Arg Glu Asn Arg Gly															Arg
	805	810															
Leu Gly Ser Gln Asp	Leu Leu Asn Trp Cys	Met Gln Ile Ala Lys															Gly
	820	825															
Met Ser Tyr Leu Glu	Asp Val Arg Leu Val	His Arg Asp Leu Ala															Ala
	835	840															
Arg Asn Val Leu Val	Lys Ser Pro Asn His	Val Lys Ile Thr Asp															Phe
	850	855															
Gly Leu Ala Arg Leu	Leu Asp Ile Asp Glu	Thr Glu Tyr His Ala															Asp
	865	870															
Gly Gly Lys Val Pro	Ile Lys Trp Met Ala	Leu Glu Ser Ile Leu															Arg
	885	890															
Arg Arg Phe Thr His	Gln Ser Asp Val Trp	Ser Tyr Gly Val Thr															Val
	900	905															
Trp Glu Leu Met Thr	Phe Gly Ala Lys Pro	Tyr Asp Gly Ile Pro															Ala
	915	920															
Arg Glu Ile Pro Asp	Leu Leu Glu Lys Gly	Glu Arg Leu Pro Gln															Pro
	930	935															
Pro Ile Cys Thr Ile	Asp Val Tyr Met Ile	Met Val Lys Cys Trp															Met
	945	950															
Ile Asp Ser Glu Cys	Arg Pro Arg Phe Arg	Glu Leu Val Ser Glu															Phe
	965	970															
Ser Arg Met Ala Arg	Asp Pro Gln Arg Phe	Val Val Ile Gln Asn															Glu
	980	985															
Asp Leu Gly Pro Ala	Ser Pro Leu Asp Ser	Thr Phe Tyr Arg Ser															Leu
	995	1000															
Leu Glu Asp Asp Asp	Met Gly Asp Leu Val	Asp Ala Glu Tyr Leu															
	1010	1015															
Val Pro Gln Gln Gly	Phe Phe Cys Pro Asp	Pro Ala Pro Gly Ala															Gly
	1025	1030															

Sequence listing.txt

Gly Met Val His His Arg His Arg Ser Ser Ser Thr Arg Ser Gly Gly
1045 1050 1055
Gly Asp Leu Thr Leu Gly Leu Glu Pro Ser Glu Glu Glu Ala Pro Arg
1060 1065 1070
Ser Pro Leu Ala Pro Ser Glu Gly Ala Gly Ser Asp Val Phe Asp Gly
1075 1080 1085
Asp Leu Gly Met Gly Ala Ala Lys Gly Leu Gln Ser Leu Pro Thr His
1090 1095 1100
Asp Pro Ser Pro Leu Gln Arg Tyr Ser Glu Asp Pro Thr Val Pro Leu
1105 1110 1115 1120
Pro Ser Glu Thr Asp Gly Tyr Val Ala Pro Leu Thr Cys Ser Pro Gln
1125 1130 1135
Pro Glu Tyr Val Asn Gln Pro Asp Val Arg Pro Gln Pro Pro Ser Pro
1140 1145 1150
Arg Glu Gly Pro Leu Pro Ala Ala Arg Pro Ala Gly Ala Thr Leu Glu
1155 1160 1165
Arg Ala Lys Thr Leu Ser Pro Gly Lys Asn Gly Val Val Lys Asp Val
1170 1175 1180
Phe Ala Phe Gly Gly Ala Val Glu Asn Pro Glu Tyr Leu Thr Pro Gln
1185 1190 1195 1200
Gly Gly Ala Ala Pro Gln Pro His Pro Pro Pro Ala Phe Ser Pro Ala
1205 1210 1215
Phe Asp Asn Leu Tyr Tyr Trp Asp Gln Asp Pro Pro Glu Arg Gly Ala
1220 1225 1230
Pro Pro Ser Thr Phe Lys Gly Thr Pro Thr Ala Glu Asn Pro Glu Tyr
1235 1240 1245
Leu Gly Leu Asp Val Pro Val
1250 1255

<210> 127
<211> 190
<212> PRT
<213> Homo sapiens

<400> 127
Met Thr Thr Ala Ser Thr Ser Gln Val Arg Gln Asn Tyr His Gln Asp
1 5 10 15
Ser Glu Ala Ala Ile Asn Arg Gln Ile Asn Leu Glu Leu Tyr Ala Ser
20 25 30
Tyr Val Tyr Leu Ser Met Ser Tyr Tyr Phe Asp Arg Asp Val Ala
35 40 45
Leu Lys Asn Phe Ala Lys Tyr Phe Leu His Gln Ser His Glu Glu Arg
50 55 60
Glu His Ala Glu Lys Leu Met Lys Leu Gln Asn Gln Arg Gly Gly Arg
65 70 75 80
Ile Phe Leu Gln Asp Ile Lys Lys Pro Asp Cys Asp Asp Trp Glu Ser
85 90 95
Gly Leu Asn Ala Met Glu Cys Ala Leu His Leu Glu Lys Asn Val Asn
100 105 110
Gln Ser Leu Leu Glu Leu His Lys Leu Ala Thr Asp Lys Asn Asp Pro
115 120 125
His Leu Cys Asp Phe Ile Glu Thr His Tyr Leu Asn Glu Gln Val Lys
130 135 140
Ala Ile Lys Glu Leu Gly Asp His Val Thr Asn Leu Arg Lys Met Gly
145 150 155 160
Ala Pro Glu Ser Gly Leu Ala Glu Tyr Leu Phe Asp Lys His Thr Trp
165 170 175
Glu Thr Val Ile Met Lys Ala Lys Pro Arg Ala Asn Phe Pro
180 185 190

<210> 128

Sequence listing.txt

<211> 175
 <212> PRT
 <213> Homo sapiens

<400> 128

```

Met Ser Ser Gln Ile Arg Gln Asn Tyr Ser Thr Asp Val Glu Ala Ala
 1      5      10      15
Val Asn Ser Leu Val Asn Leu Tyr Leu Gln Ala Ser Tyr Thr Tyr Leu
 20      25      30
Ser Leu Gly Phe Tyr Phe Asp Arg Asp Asp Val Ala Leu Glu Gly Val
 35      40      45
Ser His Phe Phe Arg Glu Leu Ala Glu Glu Lys Arg Glu Gly Tyr Glu
 50      55      60
Arg Leu Leu Lys Met Gln Asn Gln Arg Gly Gly Arg Ala Leu Phe Gln
 65      70      75      80
Asp Ile Lys Lys Pro Ala Glu Asp Glu Trp Gly Lys Thr Pro Asp Ala
 85      90      95
Met Lys Ala Ala Met Ala Leu Glu Lys Lys Leu Asn Gln Ala Leu Leu
100      105      110
Asp Leu His Ala Leu Gly Ser Ala Arg Thr Asp Pro His Leu Cys Asp
115      120      125
Phe Leu Glu Thr His Phe Leu Asp Glu Glu Val Lys Leu Ile Lys Lys
130      135      140
Met Gly Asp His Leu Thr Asn Leu His Arg Leu Gly Gly Pro Glu Ala
145      150      155      160
Gly Leu Gly Glu Tyr Leu Phe Glu Arg Leu Thr Leu Lys His Asp
165      170      175

```

<210> 129
 <211> 535
 <212> PRT
 <213> Homo sapiens

<400> 129

```

Met Leu Gly Pro Cys Met Leu Leu Leu Leu Leu Leu Leu Gly Leu Arg
 1      5      10      15
Leu Gln Leu Ser Leu Gly Ile Ile Leu Val Glu Glu Glu Asn Pro Asp
 20      25      30
Phe Trp Asn Arg Glu Ala Ala Glu Ala Leu Gly Ala Ala Lys Lys Leu
 35      40      45
Gln Pro Ala Gln Thr Ala Ala Lys Asn Leu Ile Ile Phe Leu Gly Asp
 50      55      60
Gly Met Gly Val Ser Thr Val Thr Ala Ala Arg Ile Leu Lys Gly Gln
 65      70      75      80
Lys Lys Asp Lys Leu Gly Pro Glu Ile Pro Leu Ala Met Asp Arg Phe
 85      90      95
Pro Tyr Val Ala Leu Ser Lys Thr Tyr Asn Val Asp Lys His Val Pro
100      105      110
Asp Ser Gly Ala Thr Ala Thr Ala Tyr Leu Cys Gly Val Lys Gly Asn
115      120      125
Phe Gln Thr Ile Gly Leu Ser Ala Ala Ala Arg Phe Asn Gln Cys Asn
130      135      140
Thr Thr Arg Gly Asn Glu Val Ile Ser Val Met Asn Arg Ala Lys Lys
145      150      155      160
Ala Gly Lys Ser Val Gly Val Val Thr Thr Thr Arg Val Gln His Ala
165      170      175
Ser Pro Ala Gly Thr Tyr Ala His Thr Val Asn Arg Asn Trp Tyr Ser
180      185      190
Asp Ala Asp Val Pro Ala Ser Ala Arg Gln Glu Gly Cys Gln Asp Ile
195      200      205
Ala Thr Gln Leu Ile Ser Asn Met Asp Ile Asp Val Ile Leu Gly Gly
210      215      220

```

Sequence listing.txt

Gly Arg Lys Tyr Met Phe Arg Met Gly Thr Pro Asp Pro Glu Tyr Pro
 225 230 235 240
 Asp Asp Tyr Ser Gln Gly Gly Thr Arg Leu Asp Gly Lys Asn Leu Val
 245 250 255
 Gln Glu Trp Leu Ala Lys Arg Gln Gly Ala Arg Tyr Val Trp Asn Arg
 260 265 270
 Thr Glu Leu Met Gln Ala Ser Leu Asp Pro Ser Val Ala His Leu Met
 275 280 285
 Gly Leu Phe Glu Pro Gly Asp Met Lys Tyr Glu Ile His Arg Asp Ser
 290 295 300
 Thr Leu Asp Pro Ser Leu Met Glu Met Thr Glu Ala Ala Leu Arg Leu
 305 310 315 320
 Leu Ser Arg Asn Pro Arg Gly Phe Phe Leu Phe Val Glu Gly Gly Arg
 325 330 335
 Ile Asp His Gly His His Glu Ser Arg Ala Tyr Arg Ala Leu Thr Glu
 340 345 350
 Thr Ile Met Phe Asp Asp Ala Ile Glu Arg Ala Gly Gln Leu Thr Ser
 355 360 365
 Glu Glu Asp Thr Leu Ser Leu Val Thr Ala Asp His Ser His Val Phe
 370 375 380
 Ser Phe Gly Gly Tyr Pro Leu Arg Gly Ser Ser Ile Phe Gly Leu Ala
 385 390 395 400
 Pro Gly Lys Ala Arg Asp Arg Lys Ala Tyr Thr Val Leu Leu Tyr Gly
 405 410 415
 Asn Gly Pro Gly Tyr Val Leu Lys Asp Gly Ala Arg Pro Asp Val Thr
 420 425 430
 Glu Ser Glu Ser Gly Ser Pro Glu Tyr Arg Gln Gln Ser Ala Val Pro
 435 440 445
 Leu Asp Glu Glu Thr His Ala Gly Glu Asp Val Ala Val Phe Ala Arg
 450 455 460
 Gly Pro Gln Ala His Leu Val His Gly Val Gln Glu Gln Thr Phe Ile
 465 470 475 480
 Ala His Val Met Ala Phe Ala Ala Cys Leu Glu Pro Tyr Thr Ala Cys
 485 490 495
 Asp Leu Ala Pro Pro Ala Gly Thr Thr Asp Ala Ala His Pro Gly Arg
 500 505 510
 Ser Val Val Pro Ala Leu Leu Pro Leu Leu Ala Gly Thr Leu Leu Leu
 515 520 525
 Leu Glu Thr Ala Thr Ala Pro
 530 535

<210> 130

<211> 461

<212> PRT

<213> Homo sapiens

<400> 130

Met Asn Asn Phe Gly Asn Glu Glu Phe Asp Cys His Phe Leu Asp Glu
 1 5 10 15
 Gly Phe Thr Ala Lys Asp Ile Leu Asp Gln Lys Ile Asn Glu Val Ser
 20 25 30
 Ser Ser Asp Asp Lys Asp Ala Phe Tyr Val Ala Asp Leu Gly Asp Ile
 35 40 45
 Leu Lys Lys His Leu Arg Trp Leu Lys Ala Leu Pro Arg Val Thr Pro
 50 55 60
 Phe Tyr Ala Val Lys Cys Asn Asp Ser Lys Ala Ile Val Lys Thr Leu
 65 70 75 80
 Ala Ala Thr Gly Thr Gly Phe Asp Cys Ala Ser Lys Thr Glu Ile Gln
 85 90 95
 Leu Val Gln Ser Leu Gly Val Pro Pro Glu Arg Ile Ile Tyr Ala Asn
 100 105 110
 Pro Cys Lys Gln Val Ser Gln Ile Lys Tyr Ala Ala Asn Asn Gly Val

Sequence listing.txt

```

      115      120      125
Gln Met Met Thr Phe Asp Ser Glu Val Glu Leu Met Lys Val Ala Arg
      130      135      140
Ala His Pro Lys Ala Lys Leu Val Leu Arg Ile Ala Thr Asp Asp Ser
145      150      155
Lys Ala Val Cys Arg Leu Ser Val Lys Phe Gly Ala Thr Leu Arg Thr
      165      170      175
Ser Arg Leu Leu Leu Glu Arg Ala Lys Glu Leu Asn Ile Asp Val Val
      180      185      190
Gly Val Ser Phe His Val Gly Ser Gly Cys Thr Asp Pro Glu Thr Phe
      195      200      205
Val Gln Ala Ile Ser Asp Ala Arg Cys Val Phe Asp Met Gly Ala Glu
      210      215      220
Val Gly Phe Ser Met Tyr Leu Leu Asp Ile Gly Gly Gly Phe Pro Gly
225      230      235
Ser Glu Asp Val Lys Leu Lys Phe Glu Glu Ile Thr Gly Val Ile Asn
      245      250      255
Pro Ala Leu Asp Lys Tyr Phe Pro Ser Asp Ser Gly Val Arg Ile Ile
      260      265      270
Ala Glu Pro Gly Arg Tyr Tyr Val Ala Ser Ala Phe Thr Leu Ala Val
      275      280      285
Asn Ile Ile Ala Lys Lys Ile Val Leu Lys Glu Gln Thr Gly Ser Asp
290      295      300
Asp Glu Asp Glu Ser Ser Glu Gln Thr Phe Met Tyr Tyr Val Asn Asp
305      310      315
Gly Val Tyr Gly Ser Phe Asn Cys Ile Leu Tyr Asp His Ala His Val
      325      330      335
Lys Pro Leu Leu Gln Lys Arg Pro Lys Pro Asp Glu Lys Tyr Tyr Ser
      340      345      350
Ser Ser Ile Trp Gly Pro Thr Cys Asp Gly Leu Asp Arg Ile Val Glu
      355      360      365
Arg Cys Asp Leu Pro Glu Met His Val Gly Asp Trp Met Leu Phe Glu
      370      375      380
Asn Met Gly Ala Tyr Thr Val Ala Ala Ala Ser Thr Phe Asn Gly Phe
385      390      395
Gln Arg Pro Thr Ile Tyr Tyr Val Met Ser Gly Pro Ala Trp Gln Leu
      405      410      415
Met Gln Gln Phe Gln Asn Pro Asp Phe Pro Pro Glu Val Glu Glu Gln
      420      425      430
Asp Ala Ser Thr Leu Pro Val Ser Cys Ala Trp Glu Ser Gly Met Lys
      435      440      445
Arg His Arg Ala Ala Cys Ala Ser Ala Ser Ile Asn Val
450      455      460

```

<210> 131
 <211> 1148
 <212> PRT
 <213> Homo sapiens

```

<400> 131
Met Pro Leu Phe Lys Asn Thr Ser Val Ser Ser Leu Tyr Ser Gly Cys
1      5      10
Arg Leu Thr Leu Leu Arg Pro Glu Lys Asp Gly Ala Ala Thr Arg Val
      20      25      30
Asp Ala Val Cys Thr His Arg Pro Asp Pro Lys Ser Pro Gly Leu Asp
      35      40      45
Arg Glu Arg Leu Tyr Trp Lys Leu Ser Gln Leu Thr His Gly Ile Thr
50      55      60
Glu Leu Gly Pro Tyr Thr Leu Asp Arg His Ser Leu Tyr Val Asn Gly
65      70      75      80
Phe Thr His Gln Ser Ser Met Thr Thr Thr Arg Thr Pro Asp Thr Ser
      85      90      95

```

Sequence listing.txt

Thr Met His Leu Ala Thr Ser Arg Thr Pro Ala Ser Leu Ser Gly Pro
 100 105 110
 Thr Thr Ala Ser Pro Leu Leu Val Leu Phe Thr Ile Asn Phe Thr Ile
 115 120 125
 Thr Asn Leu Arg Tyr Glu Glu Asn Met His His Pro Gly Ser Arg Lys
 130 135 140
 Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu Arg Pro Val Phe
 145 150 155 160
 Lys Asn Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu
 165 170 175
 Leu Arg Pro Lys Lys Asp Gly Ala Ala Thr Lys Val Asp Ala Ile Cys
 180 185 190
 Thr Tyr Arg Pro Asp Pro Lys Ser Pro Gly Leu Asp Arg Glu Gln Leu
 195 200 205
 Tyr Trp Glu Leu Ser Gln Leu Thr His Ser Ile Thr Glu Leu Gly Pro
 210 215 220
 Tyr Thr Leu Asp Arg Asp Ser Leu Tyr Val Asn Gly Phe Thr Gln Arg
 225 230 235 240
 Ser Ser Val Pro Thr Thr Ser Ile Pro Gly Thr Pro Thr Val Asp Leu
 245 250 255
 Gly Thr Ser Gly Thr Pro Val Ser Lys Pro Gly Pro Ser Ala Ala Ser
 260 265 270
 Pro Leu Leu Val Leu Phe Thr Leu Asn Phe Thr Ile Thr Asn Leu Arg
 275 280 285
 Tyr Glu Glu Asn Met Gln His Pro Gly Ser Arg Lys Phe Asn Thr Thr
 290 295 300
 Glu Arg Val Leu Gln Gly Leu Leu Arg Ser Leu Phe Lys Ser Thr Ser
 305 310 315 320
 Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu
 325 330 335
 Lys Asp Gly Thr Ala Thr Gly Val Asp Ala Ile Cys Thr His His Pro
 340 345 350
 Asp Pro Lys Ser Pro Arg Leu Asp Arg Glu Gln Leu Tyr Trp Glu Leu
 355 360 365
 Ser Gln Leu Thr His Asn Ile Thr Glu Leu Gly His Tyr Ala Leu Asp
 370 375 380
 Asn Asp Ser Leu Phe Val Asn Gly Phe Thr His Arg Ser Ser Val Ser
 385 390 395 400
 Thr Thr Ser Thr Pro Gly Thr Pro Thr Val Tyr Leu Gly Ala Ser Lys
 405 410 415
 Thr Pro Ala Ser Ile Phe Gly Pro Ser Ala Ala Ser His Leu Leu Ile
 420 425 430
 Leu Phe Thr Leu Asn Phe Thr Ile Thr Asn Leu Arg Tyr Glu Glu Asn
 435 440 445
 Met Trp Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu Gln
 450 455 460
 Gly Leu Leu Arg Pro Leu Phe Lys Asn Thr Ser Val Gly Pro Leu Tyr
 465 470 475 480
 Ser Gly Ser Arg Leu Thr Leu Leu Arg Pro Glu Lys Asp Gly Glu Ala
 485 490 495
 Thr Gly Val Asp Ala Ile Cys Thr His Arg Pro Asp Pro Thr Gly Pro
 500 505 510
 Gly Leu Asp Arg Glu Gln Leu Tyr Leu Glu Leu Ser Gln Leu Thr His
 515 520 525
 Ser Ile Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg Asp Ser Leu Tyr
 530 535 540
 Val Asn Gly Phe Thr His Arg Ser Ser Val Pro Thr Thr Ser Thr Gly
 545 550 555 560
 Val Val Ser Glu Glu Pro Phe Thr Leu Asn Phe Thr Ile Asn Asn Leu
 565 570 575
 Arg Tyr Met Ala Asp Met Gly Gln Pro Gly Ser Leu Lys Phe Asn Ile
 580 585 590
 Thr Asp Asn Val Met Lys His Leu Leu Ser Pro Leu Phe Gln Arg Ser

Sequence listing.txt

Ser Leu Gly Ala Arg Tyr Thr Gly Cys Arg Val Ile Ala Leu Arg Ser
 595 600 605
 Val Lys Asn Gly Ala Glu Thr Arg Val Asp Leu Leu Cys Thr Tyr Leu
 610 615 620
 625 Gln Pro Leu Ser Gly Pro Gly Leu Pro Ile Lys Gln Val Phe His Glu
 630 635 640
 Leu Ser Gln Gln Thr His Gly Ile Thr Arg Leu Gly Pro Tyr Ser Leu
 645 650 655
 Asp Lys Asp Ser Leu Tyr Leu Asn Gly Tyr Asn Glu Pro Gly Leu Asp
 660 665 670
 Glu Pro Pro Thr Thr Pro Lys Pro Ala Thr Thr Phe Leu Pro Pro Leu
 675 680 685
 Ser Glu Ala Thr Thr Ala Met Gly Tyr His Leu Lys Thr Leu Thr Leu
 690 695 700
 705 Asn Phe Thr Ile Ser Asn Leu Gln Tyr Ser Pro Asp Met Gly Lys Gly
 710 715 720
 Ser Ala Thr Phe Asn Ser Thr Glu Gly Val Leu Gln His Leu Leu Arg
 725 730 735
 Pro Leu Phe Gln Lys Ser Ser Met Gly Pro Phe Tyr Leu Gly Cys Gln
 740 745 750
 Leu Ile Ser Leu Arg Pro Glu Lys Asp Gly Ala Ala Thr Gly Val Asp
 755 760 765
 Thr Thr Cys Thr Tyr His Pro Asp Pro Val Gly Pro Gly Leu Asp Ile
 770 775 780
 785 Gln Gln Leu Tyr Trp Glu Leu Ser Gln Leu Thr His Gly Val Thr Gln
 790 795 800
 Leu Gly Phe Tyr Val Leu Asp Arg Asp Ser Leu Phe Ile Asn Gly Tyr
 805 810 815
 Ala Pro Gln Asn Leu Ser Ile Arg Gly Glu Tyr Gln Ile Asn Phe His
 820 825 830
 Ile Val Asn Trp Asn Leu Ser Asn Pro Asp Pro Thr Ser Ser Glu Tyr
 835 840 845
 Ile Thr Leu Leu Arg Asp Ile Gln Asp Lys Val Thr Thr Leu Tyr Lys
 850 855 860
 865 Gly Ser Gln Leu His Asp Thr Phe Arg Phe Cys Leu Val Thr Asn Leu
 870 875 880
 Thr Met Asp Ser Val Leu Val Thr Val Lys Ala Leu Phe Ser Ser Asn
 885 890 895
 Leu Asp Pro Ser Leu Val Glu Gln Val Phe Leu Asp Lys Thr Leu Asn
 900 905 910
 Ala Ser Phe His Trp Leu Gly Ser Thr Tyr Gln Leu Val Asp Ile His
 915 920 925
 Val Thr Glu Met Glu Ser Ser Val Tyr Gln Pro Thr Ser Ser Ser Ser
 930 935 940
 945 Thr Gln His Phe Tyr Pro Asn Phe Thr Ile Thr Asn Leu Pro Tyr Ser
 950 955 960
 Gln Asp Lys Ala Gln Pro Gly Thr Thr Asn Tyr Gln Arg Asn Lys Arg
 965 970 975
 Asn Ile Glu Asp Ala Leu Asn Gln Leu Phe Arg Asn Ser Ser Ile Lys
 980 985 990
 Ser Tyr Phe Ser Asp Cys Gln Val Ser Thr Phe Arg Ser Val Pro Asn
 995 1000 1005
 Arg His His Thr Gly Val Asp Ser Leu Cys Asn Phe Ser Pro Leu Ala
 1010 1015 1020
 1025 Arg Arg Val Asp Arg Val Ala Ile Tyr Glu Glu Phe Leu Arg Met Thr
 1030 1035 1040
 Arg Asn Gly Thr Gln Leu Gln Asn Phe Thr Leu Asp Arg Ser Ser Val
 1045 1050 1055
 Leu Val Asp Gly Tyr Ser Pro Asn Arg Asn Glu Pro Leu Thr Gly Asn
 1060 1065 1070
 Ser Asp Leu Pro Phe Trp Ala Val Ile Phe Ile Gly Leu Ala Gly Leu
 1075 1080 1085
 1090 1095 1100

Sequence listing.txt

Leu Gly Leu Ile Thr Cys Leu Ile Cys Gly Val Leu Val Thr Thr Arg
 1105 1110 1115 1120
 Arg Arg Lys Lys Glu Gly Glu Tyr Asn Val Gln Gln Gln Cys Pro Gly
 1125 1130 1135
 Tyr Tyr Gln Ser His Leu Asp Leu Glu Asp Leu Gln
 1140 1145

<210> 132
 <211> 526
 <212> PRT
 <213> Homo sapiens

<400> 132
 Met Gly His Leu Ser Ala Pro Leu His Arg Val Arg Val Pro Trp Gln
 1 5 10 15
 Gly Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
 20 25 30
 Thr Ala Gln Leu Thr Thr Glu Ser Met Pro Phe Asn Val Ala Glu Gly
 35 40 45
 Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln Gln Leu Phe Gly
 50 55 60
 Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Arg Gln Ile Val
 65 70 75 80
 Gly Tyr Ala Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Asn Ser
 85 90 95
 Gly Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val
 100 105 110
 Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp
 115 120 125
 Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu
 130 135 140
 Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys
 145 150 155 160
 Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asp Thr Thr Tyr
 165 170 175
 Leu Trp Trp Ile Asn Asn Gln Ser Leu Pro Val Ser Pro Arg Leu Gln
 180 185 190
 Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn
 195 200 205
 Asp Thr Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Val Ser Ala Asn
 210 215 220
 Arg Ser Asp Pro Val Thr Leu Asn Val Thr Tyr Gly Pro Asp Thr Pro
 225 230 235 240
 Thr Ile Ser Pro Ser Asp Thr Tyr Tyr Arg Pro Gly Ala Asn Leu Ser
 245 250 255
 Leu Ser Cys Tyr Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Leu
 260 265 270
 Ile Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn
 275 280 285
 Ile Thr Val Asn Asn Ser Gly Ser Tyr Thr Cys His Ala Asn Asn Ser
 290 295 300
 Val Thr Gly Cys Asn Arg Thr Thr Val Lys Thr Ile Ile Val Thr Glu
 305 310 315 320
 Leu Ser Pro Val Val Ala Lys Pro Gln Ile Lys Ala Ser Lys Thr Thr
 325 330 335
 Val Thr Gly Asp Lys Asp Ser Val Asn Leu Thr Cys Ser Thr Asn Asp
 340 345 350
 Thr Gly Ile Ser Ile Arg Trp Phe Lys Asn Gln Ser Leu Pro Ser
 355 360 365
 Ser Glu Arg Met Lys Leu Ser Gln Gly Asn Thr Thr Leu Ser Ile Asn
 370 375 380
 Pro Val Lys Arg Glu Asp Ala Gly Thr Tyr Trp Cys Glu Val Phe Asn

Sequence listing.txt

```

385          390          395          400
Pro Ile Ser Lys Asn Gln Ser Asp Pro Ile Met Leu Asn Val Asn Tyr
          405          410          415
Asn Ala Leu Pro Gln Glu Asn Gly Leu Ser Pro Gly Ala Ile Ala Gly
          420          425          430
Ile Val Ile Gly Val Val Ala Leu Val Ala Leu Ile Ala Val Ala Leu
          435          440          445
Ala Cys Phe Leu His Phe Gly Lys Thr Gly Arg Ala Ser Asp Gln Arg
          450          455          460
Asp Leu Thr Glu His Lys Pro Ser Val Ser Asn His Thr Gln Asp His
465          470          475          480
Ser Asn Asp Pro Pro Asn Lys Met Asn Glu Val Thr Tyr Ser Thr Leu
          485          490          495
Asn Phe Glu Ala Gln Gln Pro Thr Gln Pro Thr Ser Ala Ser Pro Ser
          500          505          510
Leu Thr Ala Thr Glu Ile Ile Tyr Ser Glu Val Lys Lys Gln
          515          520          525

```

<210> 133
 <211> 212
 <212> PRT
 <213> Homo sapiens

```

<400> 133
Met Gly Pro Pro Ser Ala Pro Pro His Arg Glu Cys Ile Pro Trp Gln
 1          5          10          15
Gly Leu Leu Leu Thr Ala Ser Leu Leu Asn Phe Trp Asn Pro Pro Thr
          20          25          30
Thr Ala Lys Leu Thr Ile Glu Ser Met Pro Leu Ser Val Ala Glu Gly
          35          40          45
Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln His Leu Phe Gly
          50          55          60
Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Ser Leu Ile Val
65          70          75          80
Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Ala Ala Tyr Ser
          85          90          95
Gly Arg Glu Thr Ile Tyr Thr Asn Ala Ser Leu Leu Ile Gln Asn Val
          100          105          110
Thr Gln Asn Asp Ile Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp
          115          120          125
Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Gln Glu Asn
          130          135          140
Ala Pro Gly Leu Pro Val Gly Ala Val Ala Gly Ile Val Thr Gly Val
145          150          155          160
Leu Val Gly Val Ala Leu Val Ala Ala Leu Val Cys Phe Leu Leu Leu
          165          170          175
Ala Lys Thr Gly Arg Pro Trp Ser Leu Pro Gln Leu Cys Leu Leu Asp
          180          185          190
Val Pro Ser Leu His Cys Leu Gly Pro Pro Thr Gln Pro Gln Asp Ser
          195          200          205
Ser Phe His Leu
210

```

<210> 134
 <211> 244
 <212> PRT
 <213> Homo sapiens

```

<400> 134
Met Gly Pro Pro Ser Ala Ala Pro Arg Gly Gly His Arg Pro Trp Gln
 1          5          10          15

```

Sequence listing.txt

```

Gly Leu Leu Ile Thr Ala Ser Leu Leu Thr Phe Trp Asp Pro Pro Thr
   20   25   30
Thr Val Gln Phe Thr Ile Glu Ala Leu Pro Ser Ser Ala Ala Glu Gly
   35   40
Lys Asp Val Leu Leu Leu Ala Cys Asn Ile Ser Glu Thr Ile Gln Ala
   50   55   60
Tyr Tyr Trp His Lys Gly Lys Thr Ala Glu Gly Ser Pro Leu Ile Ala
   65   70   75   80
Gly Tyr Ile Thr Asp Ile Gln Ala Asn Ile Pro Gly Ala Ala Tyr Ser
   85   90   95
Gly Arg Glu Gln Val Tyr Pro Asn Gly Ser Leu Leu Phe Gln Asn Ile
  100  105  110
Thr Leu Glu Asp Ala Gly Ser Tyr Thr Leu Arg Thr Ile Asn Ala Ser
  115  120  125
Tyr Asp Ser Asp Gln Ala Thr Gly Gln Leu His Val His Gln Asn Asn
  130  135  140
Val Pro Gly Leu Pro Val Gly Ala Val Ala Gly Ile Val Thr Gly Val
  145  150  155  160
Leu Val Gly Val Ala Leu Val Ala Ala Leu Val Cys Phe Leu Leu Leu
  165  170  175
Ser Arg Thr Gly Arg Ala Ser Ile Gln Arg Asp Leu Arg Glu Gln Pro
  180  185  190
Pro Pro Ala Ser Thr Pro Gly His Gly Pro Ser His Arg Ser Thr Phe
  195  200  205
Ser Ala Pro Leu Pro Ser Pro Arg Thr Ala Thr Pro Ile Tyr Val Glu
  210  215  220
Phe Leu Tyr Ser Asp Ala Asn Ile Tyr Cys Gln Ile Asp His Lys Ala
  225  230  235  240
Asp Val Val Ser

```

<210> 135
 <211> 344
 <212> PRT
 <213> Homo sapiens

```

<400> 135
Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu His Val Pro Trp Lys
   1   5  10  15
Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Pro Pro Thr
  20  25  30
Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe Asn Val Ala Glu Gly
  35  40  45
Lys Glu Val Leu Leu Leu Ala His Asn Leu Pro Gln Asn Arg Ile Gly
  50  55  60
Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly Asn Ser Leu Ile Val
  65  70  75  80
Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro Gly Pro Ala Tyr Ser
  85  90  95
Gly Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Ile Gln Asn Val
 100 105 110
Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln Val Ile Lys Ser Asp
 115 120 125
Leu Val Asn Glu Glu Ala Thr Gly Gln Phe His Val Tyr Pro Glu Leu
 130 135 140
Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys
 145 150 155 160
Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Val Gln Asn Thr Thr Tyr
 165 170 175
Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro Arg Leu Gln
 180 185 190
Leu Ser Asn Gly Asn Met Thr Leu Thr Leu Leu Ser Val Lys Arg Asn

```

Sequence listing.txt

```

      195      200      205
Asp Ala Gly Ser Tyr Glu Cys Glu Ile Gln Asn Pro Ala Ser Ala Asn
  210      215      220
Arg Ser Asp Pro Val Thr Leu Asn Val Leu Tyr Gly Pro Asp Val Pro
  225      230      235
Thr Ile Ser Pro Ser Lys Ala Asn Tyr Arg Pro Gly Glu Asn Leu Asn
      245      250      255
Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala Gln Tyr Ser Trp Phe
      260      265      270
Ile Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu Leu Phe Ile Pro Asn
      275      280      285
Ile Thr Val Asn Asn Ser Gly Ser Tyr Met Cys Gln Ala His Asn Ser
      290      295      300
Ala Thr Gly Leu Asn Arg Thr Thr Val Thr Met Ile Thr Val Ser Gly
  305      310      315      320
Ser Ala Pro Val Leu Ser Ala Val Ala Thr Val Gly Ile Thr Ile Gly
      325      330      335
Val Leu Ala Arg Val Ala Leu Ile
      340

```

<210> 136
 <211> 265
 <212> PRT
 <213> Homo sapiens

```

<400> 136
Met Gly Ser Pro Ser Ala Cys Pro Tyr Arg Val Cys Ile Pro Trp Gln
  1      5      10      15
Gly Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Leu Pro Asn
      20      25      30
Ser Ala Gln Thr Asn Ile Asp Val Val Pro Phe Asn Val Ala Glu Gly
      35      40      45
Lys Glu Val Leu Leu Val Val His Asn Glu Ser Gln Asn Leu Tyr Gly
      50      55      60
Tyr Asn Trp Tyr Lys Gly Glu Arg Val His Ala Asn Tyr Arg Ile Ile
  65      70      75      80
Gly Tyr Val Lys Asn Ile Ser Gln Glu Asn Ala Pro Gly Pro Ala His
      85      90      95
Asn Gly Arg Glu Thr Ile Tyr Pro Asn Gly Thr Leu Leu Ile Gln Asn
      100      105      110
Val Thr His Asn Asp Ala Gly Phe Tyr Thr Leu His Val Ile Lys Glu
      115      120      125
Asn Leu Val Asn Glu Glu Val Thr Arg Gln Phe Tyr Val Phe Ser Glu
      130      135      140
Pro Pro Lys Pro Ser Ile Thr Ser Asn Asn Phe Asn Pro Val Glu Asn
  145      150      155      160
Lys Asp Ile Val Val Leu Thr Cys Gln Pro Glu Thr Gln Asn Thr Thr
      165      170      175
Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Leu Val Ser Pro Arg Leu
      180      185      190
Leu Leu Ser Thr Asp Asn Arg Thr Leu Val Leu Leu Ser Ala Thr Lys
      195      200      205
Asn Asp Ile Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Val Gly Ala
      210      215      220
Ser Arg Ser Asp Pro Val Thr Leu Asn Val Arg Tyr Glu Ser Val Gln
  225      230      235      240
Ala Ser Ser Pro Asp Leu Ser Ala Gly Thr Ala Val Ser Ile Met Ile
      245      250      255
Gly Val Leu Ala Gly Met Ala Leu Ile
      260      265

```

Sequence listing.txt

<210> 137
 <211> 349
 <212> PRT
 <213> Homo sapiens

<400> 137
 Met Gly Pro Ile Ser Ala Pro Ser Cys Arg Trp Arg Ile Pro Trp Gln
 1 5 10 15
 Gly Leu Leu Leu Thr Ala Ser Leu Phe Thr Phe Trp Asn Pro Pro Thr
 20 25 30
 Thr Ala Gln Leu Thr Ile Glu Ala Val Pro Ser Asn Ala Glu Gly
 35 40 45
 Lys Glu Val Leu Leu Leu Val His Asn Leu Pro Gln Asp Pro Arg Gly
 50 55 60
 Tyr Asn Trp Tyr Lys Gly Glu Thr Val Asp Ala Asn Arg Arg Ile Ile
 65 70 75 80
 Gly Tyr Val Ile Ser Asn Gln Gln Ile Thr Pro Gly Pro Ala Tyr Ser
 85 90 95
 Asn Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu Leu Met Arg Asn Val
 100 105 110
 Thr Arg Asn Asp Thr Gly Ser Tyr Thr Leu Gln Val Ile Lys Leu Asn
 115 120 125
 Leu Met Ser Glu Glu Val Thr Gly Gln Phe Ser Val His Pro Glu Thr
 130 135 140
 Pro Lys Pro Ser Ile Ser Ser Asn Asn Ser Asn Pro Val Glu Asp Lys
 145 150 155 160
 Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Thr Gln Asn Thr Thr Tyr
 165 170 175
 Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val Ser Pro Arg Leu Gln
 180 185 190
 Leu Ser Asn Gly Asn Arg Thr Leu Thr Leu Leu Ser Val Thr Arg Asn
 195 200 205
 Asp Val Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Ala Ser Ala Asn
 210 215 220
 Phe Ser Asp Pro Val Thr Leu Asn Val Leu Tyr Gly Pro Asp Ala Pro
 225 230 235 240
 Thr Ile Ser Pro Ser Asp Thr Tyr Tyr His Ala Gly Val Asn Leu Asn
 245 250 255
 Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ser Gln Tyr Ser Trp Ser
 260 265 270
 Val Asn Gly Thr Phe Gln Gln Tyr Thr Gln Lys Leu Phe Ile Pro Asn
 275 280 285
 Ile Thr Thr Lys Asn Ser Gly Ser Tyr Ala Cys His Thr Thr Asn Ser
 290 295 300
 Ala Thr Gly Arg Asn Arg Thr Thr Val Arg Met Ile Thr Val Ser Asp
 305 310 315 320
 Ala Leu Val Gln Gly Ser Ser Pro Gly Leu Ser Ala Arg Ala Thr Val
 325 330 335
 Ser Ile Met Ile Gly Val Leu Ala Arg Val Ala Leu Ile
 340 345

<210> 138
 <211> 459
 <212> PRT
 <213> Homo sapiens

<400> 138
 Met Ala Pro Leu Cys Pro Ser Pro Trp Leu Pro Leu Leu Ile Pro Ala
 1 5 10 15
 Pro Ala Pro Gly Leu Thr Val Gln Leu Leu Leu Ser Leu Leu Leu Leu
 20 25 30
 Met Pro Val His Pro Gln Arg Leu Pro Arg Met Gln Glu Asp Ser Pro

Sequence listing.txt

```

      35      40      45
Leu Gly Gly Gly Ser Ser Gly Glu Asp Asp Pro Leu Gly Glu Glu Asp
  50      55      60
Leu Pro Ser Glu Glu Asp Ser Pro Arg Glu Glu Asp Pro Pro Gly Glu
  65      70      75      80
Glu Asp Leu Pro Gly Glu Glu Asp Leu Pro Gly Glu Glu Asp Leu Pro
  85      90      95
Glu Val Lys Pro Lys Ser Glu Glu Glu Gly Ser Leu Lys Leu Glu Asp
 100      105      110
Leu Pro Thr Val Glu Ala Pro Gly Asp Pro Gln Glu Pro Gln Asn Asn
 115      120      125
Ala His Arg Asp Lys Glu Gly Asp Asp Gln Ser His Trp Arg Tyr Gly
 130      135      140
Gly Asp Pro Pro Trp Pro Arg Val Ser Pro Ala Cys Ala Gly Arg Phe
 145      150      155      160
Gln Ser Pro Val Asp Ile Arg Pro Gln Leu Ala Ala Phe Cys Pro Ala
 165      170      175
Leu Arg Pro Leu Glu Leu Leu Gly Phe Gln Leu Pro Pro Leu Pro Glu
 180      185      190
Leu Arg Leu Arg Asn Asn Gly His Ser Val Gln Leu Thr Leu Pro Pro
 195      200      205
Gly Leu Glu Met Ala Leu Gly Pro Gly Arg Glu Tyr Arg Ala Leu Gln
 210      215      220
Leu His Leu His Trp Gly Ala Ala Gly Arg Pro Gly Ser Glu His Thr
 225      230      235      240
Val Glu Gly His Arg Phe Pro Ala Glu Ile His Val Val His Leu Ser
 245      250      255
Thr Ala Phe Ala Arg Val Asp Glu Ala Leu Gly Arg Pro Gly Gly Leu
 260      265      270
Ala Val Leu Ala Ala Phe Leu Glu Glu Gly Pro Glu Glu Asn Ser Ala
 275      280      285
Tyr Glu Gln Leu Leu Ser Arg Leu Glu Glu Ile Ala Glu Glu Gly Ser
 290      295      300
Glu Thr Gln Val Pro Gly Leu Asp Ile Ser Ala Leu Leu Pro Ser Asp
 305      310      315      320
Phe Ser Arg Tyr Phe Gln Tyr Glu Gly Ser Leu Thr Thr Pro Pro Cys
 325      330      335
Ala Gln Gly Val Ile Trp Thr Val Phe Asn Gln Thr Val Met Leu Ser
 340      345      350
Ala Lys Gln Leu His Thr Leu Ser Asp Thr Leu Trp Gly Pro Gly Asp
 355      360      365
Ser Arg Leu Gln Leu Asn Phe Arg Ala Thr Gln Pro Leu Asn Gly Arg
 370      375      380
Val Ile Glu Ala Ser Phe Pro Ala Gly Val Asp Ser Ser Pro Arg Ala
 385      390      395      400
Ala Glu Pro Val Gln Leu Asn Ser Cys Leu Ala Ala Gly Asp Ile Leu
 405      410      415
Ala Leu Val Phe Gly Leu Leu Phe Ala Val Thr Ser Val Ala Phe Leu
 420      425      430
Val Gln Met Arg Arg Gln His Arg Arg Gly Thr Lys Gly Gly Val Ser
 435      440      445
Tyr Arg Pro Ala Glu Val Ala Glu Thr Gly Ala
 450      455

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